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STORAGE

ASTRONOMICAL
OBSERVATIONS

MADE AT THE
OBSERVATORY OF CAMBRIDGE

BY

THE REV. JAMES CHALLIS, M.A.

PLUMIAN PROFESSOR OF ASTRONOMY AND EXPERIMENTAL PHILOSOPHY
IN THE UNIVERSITY OF CAMBRIDGE,
AND LATE FELLOW OF TRINITY COLLEGE.

VOL. XVI.
FOR THE YEARS 1844 AND 1845.



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P R E F A C E.

THIS Volume contains the Meridian Observations of 1844 and 1845, with Occultations of Fixed Stars by the Moon, the observations of the new Planets and of Comets, made with the Northumberland Equatoreal in those years, being reserved for separate publication.

The Transit Observations of 1844 were taken by Mr Glaisher, with the exception of a portion taken by myself to maintain the consecutiveness of the series in the absence of Mr Glaisher from indisposition or on vacation, and a few by Mr John Holesworth Morgan, who commenced observing on trial Nov. 23. Mr Glaisher's connexion with the Observatory ceased at the close of the year, when he was succeeded by Mr Morgan. The Circle Observations both of 1844 and 1845 were nearly all taken by Mr Berry, and the Transit Observations of 1845 nearly all by Mr Morgan.

The objects embraced by the Meridian Observations of 1844 are the Sun, the Moon, the Planets Mercury, Venus, Pallas, and Ceres, and De Vico's First Comet, double stars contained either in Struve's *Catalogus Novus*, or in his Catalogue of 514 Double and Multiple Stars published in 1843, Moon-culminating stars, and stars used for comparison in equatoreal observations, together with stars observed for instrumental determinations. The Meridian Observations of 1845 are confined to stars, the classes of which are those just mentioned.

All the observations have been completely reduced with the strictest attention to accuracy, and the calculations have all been scrupulously examined.

The Transit and Circle Observations are printed in this Volume in a more abbreviated form than in those of former years, the record of each observation, and the steps and result of the calculation of the Apparent Right Ascension, or of the Apparent North Polar Distance, being contained in one page, instead of extending over opposite pages. The change has been made on the principle of exhibiting in full, as before, all that is recorded in taking an observation, and omitting only some steps of the calculation. In consequence of these omissions it has been thought right to explain the processes of calculation in greater detail in the Introduction, and for the purpose of facilitating the verification of the results, to insert the auxiliary tables used in obtaining them. The columns containing the corrections from the apparent to the mean places of stars, and the assumed semidiameters and parallax-corrections of the bodies of the Solar System, used in reducing an observation of a limb to an observation of the centre, and an Apparent to a Geocentric North Polar Distance, are transferred to the part of the Volume where the results of the observations of stars and of the several moving bodies, are separately collected and arranged. It is hoped that the utility of the work will in no respect be diminished by the new scheme of printing, and that the reductions may be verified with nearly the same facility as in former Volumes.

J. CHALLIS.

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ERRATA AND CORRIGENDA.

IN THE VOLUME FOR 1840 AND 1841.

Page [42], the note (*d*) is incorrect, the same star having most probably been observed on Dec. 11 as on Dec. 10 and 17. Hence in page [55] arrange the three observations of Σ 2905 together, and in the Catalogue, p. [58] strike out the observation of Σ 2905 *f*, and for the number of observations of Σ 2905 *p* read 3 for 2, and for seconds of R.A. read 25,82 for 25,71.

IN THE VOLUME FOR 1842.

p. 42, June 14. The star called Σ 1935 precedes Σ 1935 about 1^m and is of nearly the same N.P.D. The noted time should not have been altered. Hence in p. 105, for Σ 1935 read \times N.P.D. $58^{\circ}.44'$, and for 13^m read 12^m. Also, in the Catalogue, p. 112, strike out Σ 1935 *np*, and for 15.13.33,95 read 15.12.33,95.

p. 92, Dec. 28. For \times N.P.D. $74^{\circ}.1'$ read \times N.P.D. $73^{\circ}.57'$. The same alteration to be made for this star in p. 98, fourth column, and in the Catalogue, p. 111.

p. 109. It is most probable that the preceding star of Σ 2905 was observed in every instance. Hence the three observations of Oct. 3, 6, and 21 should be grouped together, and in the Catalogue, p. 113, the observations of Σ 2905 *sf* should be struck out, the number of observations of Σ 2905 *np* should be 3, and the seconds of R.A. 28,76.

p. 250. A slight mistake was committed in solving the equations: the correct results are $m = -0''.778$, $n = +0''.069$, $p = -0''.361$. Hence $\delta\lambda = -1''.959$, the mean error of the Tabular R.A. $= -0''.129$, $\delta I = +0''.075$, and the error of the assumed R.A. of the fundamental stars is $-0''.129 + 0''.067 = -0''.062$.

IN THE VOLUME FOR 1843.

p. vii, line 6, in the denominator of the formula for z , for $h - h'$ read $h' - h$.

p. vii, line 11 from the bottom, for 'seconds of transits,' read 'seconds of transit.'

IN THE PRESENT VOLUME.

p. xl, line 4 from the bottom, for 28^s.48 read 23^s.48.

p. 1. In the Title, as also in the running Title to p. 17, the words 'with the Transit,' ought properly to be inserted after the word 'observed.'

p. 2. The wire-frame was taken out between Jan. 2 and Jan. 5 to put in a finer micrometer-wire. Hence the error of collimation, $-0''.89$, used at the end of 1843, should have been continued on Jan. 1 and 2, instead of $-2''.05$. The apparent R.A. from the observations of those days, are but little affected by this inaccuracy.

p. 2, Jan. 10. In the apparent R.A. of \odot 1 L., for 55,98 read 55,08.

p. 8, Feb. 22. Wires I and II of \times N.P.D. $82^{\circ}.26'$ should be 21,1 and 35,0. Hence seconds of concluded transit should be 2,13, seconds of meridian transit, 2,62, and seconds of Apparent R.A., 33,66. Corrected in the Catalogue.

p. 24, Aug. 2. In the observation of the Sun, the hours should be 8, and the seconds of Apparent R.A. of the Limbs, 32,83 and 45,77. The subsequent calculations are correct.

p. 50. R.A. of α Leporis, for 5.25.21,23 read 5.25.51,23.

p. 55, Jan. 15. The *sp* attached to A Orionis most probably belongs to *m* Orionis.

p. 55, Jan. 16. For \rangle read \odot .

p. 64, Mar. 21. The *sf* attached to Σ 1318 appears to be a mistake for *nf*.

p. 64, Mar. 26. The *np* attached to Σ 1633 is probably a mistake for *nf*. So on March 28 in p. 65. See the observation of the same star on March 13, p. 63.

p. 71, April 24. Pallas was taken on the micrometer wire as left in the preceding observation. Hence the micrometer reading 9,600 should be inserted, the seconds of the concluded circle reading should be altered to 19,82, and the seconds of Apparent N.P.D., to 49,40.

p. 76. It is not mentioned in the notes that the Circle was taken from the wall May 27, 22^b.

p. 77, May 31. The *sf* attached to Σ 1776 appears to be a mistake for *nf*. By comparison with observations of this star in 1842, the north-following star was observed both on this day and on May 1.

p. 78, June 14, μ Draconis. For *sf* read *sp*. See July 15.

p. 80, June 28, Sun N.L. In concluded Circle reading, for 51 read 50, and in Apparent N.P.D. for 67.27.21,78 read 66.27.20,49.

p. 120, approximate mean R.A. of Σ_2 241. For 17.59.12 read 17.59.4.

p. 131. Assumed semidiameter of the Moon, N.L. June 29. For 16.30,19 read 16.30,91.

pp. 132, 133, and 134. The assumed semidiameter is affected by an error of $0''.33$ in excess, on which account the 'Reductions to Transit of Centre' are slightly erroneous. The true values will be found by adding to the Tabular values the corrections given in p. xxxviii of the Introduction. The R.A. of Centre and Errors of Tables require to be altered accordingly. Also, in consequence of the same error, the Geocentric N.P.D. of centre are too great by $0''.33$ when they depend on observations of the N.L., and too small by $0''.33$ when on those of the S.L.

CAMBRIDGE OBSERVATIONS.

INTRODUCTION.

THE *Instruments* and *Methods of observing* employed in taking the Observations recorded in this Volume, are described in the Introductions to the Volumes of Observations of 1838 and previous years. The following pages contain explanations of the tabulated Observations and such occasional notices as could not be given at length in the body of the work, together with an account of the constants and formulæ used in the Calculations.

OBSERVATIONS OF 1844.

1. *Apparent Right Ascensions observed with the Transit.* Pages 1—38.

The first division of the tabular portion of the work is allotted to the Transit Observations and the Calculation of Apparent Right Ascensions.

The *first column* contains the day of the month, supposed always to commence with the Sun's meridian passage.

The *second column* contains the names of the objects observed. With respect to nomenclature the following rules have been adhered to as closely as possible. Stars contained in the Nautical Almanac have the same names here given them as in that work. Stars in the Catalogue of the British Association and not in the Nautical Almanac, are named, in preference, by the letters in that Catalogue; next, by Flamsteed's numbers; and lastly, by the numbers of the Catalogue. The hour and number of Piazzi's Catalogue are used, if the star is not in the Catalogue of the British Association. Double stars in Struve's *Catalogus Novus*, if not found in any of the above-mentioned works, are designated by the letter Σ prefixed to the number of that Catalogue. Struve's additional Catalogue of 514 double and multiple stars, published in 1843, is referred to by the symbol Σ_2 prefixed to the Catalogue number. The double-stars are such only as have been selected for micro-metrical measurement with the Northumberland Telescope. A star not coming under any of the above classes, if found in Weisse's reduced Catalogue of Stars included in Bessel's Zones (1846), is designated by the hour and number of that Catalogue preceded by the letter B. If, not being in Weisse's Catalogue, the star is in the British Association reduced Catalogue of Stars contained in the *Histoire Céleste* of Lalande, it is named by the number of this Catalogue with the letters H. C. prefixed. All other stars are designated by their approximate North Polar Distances.

In observations of double and multiple stars, the rule generally followed both in the Transit and Circle observations is, to select the brightest when decidedly brighter than the others, and of two or more nearly equally bright, to take the preceding. In many instances the observer notes the one selected as *preceding, following, north, south, north preceding, north following, south preceding, south following*, by the letters *p, f, n, s, np, nf, sp, sf*, in their usual signification, the preceding star being that of less R.A., and the north star that of less N.P.D. This is done when the application of the foregoing rule is doubtful, or when the stars are very close, to shew that they are seen separate, or to facilitate the identifying of the stars. The above letters are placed after the names of the stars in the second column, only in case the observer has thus noted at the time of observation the star selected.

The *seven succeeding columns* contain the seconds, by the Transit clock, of the times of passage over the seven wires. It has been thought unnecessary to give the hour and minute for more than one wire, as they may be readily inferred for the others by means of the Table of intervals below. The hour and minute in the seventh of the columns always refer to the wire last observed. In several instances the noted times for Polaris and δ Ursæ Minoris, are times of transit across the middle wire of the seven, and across the micrometer wire placed at equidistant intervals of one revolution on each side of the middle wire. When this is the case the letter M is placed after the name of the star.

When, as not unfrequently happens from atmospheric and accidental causes, the times of transit across all the wires cannot be observed, a correction is necessary for reducing the mean of the observed times to the time of transit over the mean of all the wires. This reduction is effected by adding (with the proper sign) to the mean of the observed times, the sum, divided by the number of wires observed, of the distances in time of the omitted wires from the mean of all. (See Introduction to the Observations of 1836, p. xiii.)

The following table of intervals of the seven wires from the mean of all, which was used throughout the year, is the same that was employed from Aug. 21 of 1843. It was computed from nine transits of Polaris and twenty-eight transits of δ Ursæ Minoris taken from Jan. 12 to Oct. 9 of 1843. The wires are distinguished by the letters *A, B, C, D, E, F, G*; and stars above the Pole pass them in this order when the illuminated end of the axis is East. The position of the instrument is stated in the space immediately below the columns.

Intervals of the wires from the mean of all.

Wire.	Interval for an Equatoreal Star.	Interval for δ Ursæ Minoris. Declination = $86^{\circ}.35' + n''$.	Interval for 51 (Hevelii) Cephei. Declination = $87^{\circ}.15' + n''$.	Interval for Polaris. Declination = $88^{\circ}.28' + n''$.
A	- 40,400	- 11 . 18,16 - $n \times 0,055$	- 14 . 2,53 - $n \times 0,085$	- 25 . 12,84 - $n \times 0,275$
B	- 26,934	- 7 . 32,02 - $n \times 0,037$	- 9 . 21,38 - $n \times 0,037$	- 16 . 47,46 - $n \times 0,183$
C	- 13,517	- 3 . 46,81 - $n \times 0,018$	- 4 . 41,80 - $n \times 0,029$	- 8 . 25,24 - $n \times 0,092$
D	- 0,068	- 1,14	- 1,31	- 2,54
E	+ 13,604	+ 3 . 48,27 + $n \times 0,019$	+ 4 . 43,49 + $n \times 0,029$	+ 8 . 28,50 + $n \times 0,092$
F	+ 26,898	+ 7 . 31,41 + $n \times 0,037$	+ 9 . 20,72 + $n \times 0,057$	+ 16 . 46,10 + $n \times 0,182$
G	+ 40,418	+ 11 . 18,47 + $n \times 0,055$	+ 14 . 2,83 + $n \times 0,085$	+ 25 . 13,53 + $n \times 0,275$

The intervals for a star whose North Polar Distance is not very small, are obtained by multiplying the intervals for an equatoreal star by the cosecant of N.P.D. For the Sun and Planets an additional factor is used, which is deduced from the horary variation of their R.A. given in the Nautical Almanac. The multiplier for the Moon takes account of the variation of R.A. as affected by parallax, and is calculated from the expression

$$\frac{3600 + I}{3600} \times \frac{\sin \text{Moon's geocentric Z.D.}}{\sin \text{Moon's apparent Z.D.}} \times \text{cosecant of N.P.D.,}$$

where *I* is the increase of the Moon's R.A. in passing over 1^h of terrestrial longitude, given under the head of Moon-culminating Stars in the Nautical Almanac.

The minutes and seconds of the concluded times of transit over the mean of the seven wires, as given by the clock, are placed in the *tenth column*. When the object has been observed at all the wires, the concluded time is merely the mean of the times at the seven wires. In case of an incomplete observation, the concluded time is the mean of the noted

times corrected for the omitted times in the manner already explained. When the transit of Polaris or δ Ursæ Minoris is taken with the micrometer wire, the mean of the times is corrected by the interval of D from the mean of all the wires as given in the foregoing Table.

The columns which next follow contain steps of the calculation by which the Apparent Right Ascensions are inferred from the concluded times of Transit; which is done by applying corrections for *Collimation Error*, *Level Error*, *Asimuth Error*, and *Clock Error*. The methods of obtaining these corrections will here be severally stated in the order of their application.

Collimation Error.—A wooden cross in the form of X, placed so that the vertical micrometer-wire can be brought to bisect its acute angles, serves as a southern mark for determining the error of collimation. It is fixed on the tower of Grantchester church, at the distance of about $2\frac{1}{2}$ miles, and its angular distance West of the meridian is about $14''$. To avoid any error that may arise from a change of position of the axis of the instrument by the reversion, a northern mark is also used. Instead of a fixed northern mark, for which there is no convenient object, a small transit instrument is put up as a horizontal collimator in the northern opening for the shutters, and the micrometer-wire is applied to a selected point of the image of one of its wires. This is found in practice to answer well enough the required purpose.

The following were the determinations of Collimation Error made in 1844.

Jan. 6, 3— $4\frac{1}{2}^b$. The Transit was reversed under unfavorable circumstances, it being too late in the day. The cross was sufficiently distinct, but unsteady. The collimator's wire was seen obscurely before the reversion, and after the reversion it was necessary to hold a lamp before the eye-piece of the collimator to make the wire visible. Through inadvertence the micrometer reading for coincidence with D was not taken after the reversion.

Illumination East.*

Mean of 6 readings, micrometer-wire coinciding with D	$r.$ 24,180
..... 6 bisecting South mark	22,877
..... 9 bisecting North mark	15,769

Illumination West.

Mean of 7 readings, micrometer-wire bisecting North mark	$r.$ 32,816
..... 7 bisecting South mark	25,457
Reading for line of collimation by South mark.....	24,167
..... North mark.....	24,292
Reading for true line of collimation	24,230
Reading for coincidence with D	24,180

As the micrometer readings increase in going from the illumination end of the axis, stars entering from the West come to D before coming to the true line of collimation. Hence the error of collimation of D , that is, the angular deviation of the line of collimation through D eastward from the true line of collimation, is $+0''.050$ in micrometer revolutions, or $+0''.85$ in arc, one micrometer revolution being $17''.06$. By the Table in p. ii. the mean of all the wires is nearer to the illuminated end of the axis than D by $0''.068$, or $1''.02$. Hence for illumination West, the error of collimation of the mean of the wires, inclusive of the correction $-0''.18$ for diurnal aberration, is $+0''.85 + 1''.02 - 0''.18 = +1''.69$. Similarly the concluded error of collimation for illumination East is $-0''.85 - 1''.02 - 0''.18 = -2''.05$.

* The position of the instrument is indicated by saying 'Illumination East' or 'Illumination West,' according as the pivot which is perforated to admit the light of a lamp for illuminating the field of view, is East or West.

On Jan. 4, the wire-frame was taken out for the purpose of inserting a finer micrometer-wire. Consequently the error of collimation $-0''.89$, used at the end of 1843, should have been continued on Jan. 1 and 2, instead of the value $-2''.05$. This mistake, which was not detected till after the printing of the observations, affects in a very small degree the apparent R.A. deduced from the observations on those days.

In consequence of indisposition and the occupation of my time by Lectures, I was prevented making another determination of collimation error before June 8. On that day, and on subsequent occasions, the error was found by the intervention of Bohnenberger's collimating eye-piece, used in a manner which I now proceed to explain.

A moveable wooden stage in the Transit Room, (intended originally for taking transits by reflexion for the determination of Level Error), is made to pass over the West Pier by running on a kind of rail-way, and gives the observer a position in which he can look through the Telescope when directed to the Nadir. The form of the collimating eye-piece which I use, is a common inverting microscope of three lenses, to which is attached, beyond the third lens, a piece of plate-glass, inclined at an angle of 45° to the axis of the microscope. The eye-piece of the Telescope being removed, this apparatus is put in its place, so that the plate-glass is between the wires and the microscope; and when the Telescope is directed vertically to a trough of mercury, the wires and their images by reflexion become visible as dark lines on a bright ground, by throwing the light of a lamp on the plate-glass. That the wires and their images may be distinctly seen at the same time, it is necessary that the wires should be accurately in the geometrical focus of the object-glass of the Telescope. The position of the wires of the Transit Telescope was found to satisfy this condition very nearly, and has consequently not been changed.

The determination of the collimation error of the middle wire is effected by first measuring with the micrometer-wire the interval between the middle wire and the position of the micrometer-wire when it exactly coincides with its own image. Clearly this interval, expressed in arc, is the sum or difference of the Level Error and the collimation error of the middle wire. Hence the Level Error being ascertained at the time by the Spirit Level, the collimation error becomes known.

This method supposes the pivots to be exactly cylindrical. As the pivots of the Cambridge Transit do not satisfy this condition, I have not trusted to the collimating eye-piece for absolute determinations of error of collimation: I made several contemporaneous determinations by the two methods, and by comparison of the results obtained two constants for correcting the values given by the collimating eye-piece both when the Illumination is East and when it is West. Thus virtually the collimation error is determined by the usual method, and the collimating eye-piece is merely employed as an auxiliary, the use of which is very convenient on account of its being independent of the condition of the atmosphere. Before shewing how the values of collimation error used in the reduction of the observations were ascertained, it will be proper to state the particulars of the determination of the above-mentioned constants. I shall first give the results obtained in the usual way by the meridian marks and reversing the Transit.

July 26, 1^h. The Transit was reversed. The readings of the micrometer-wire for coincidence with *D* and for bisection of the cross were noted at July 25, 19^h, after which the measures were interrupted in consequence of the wires of the collimator being found to be out of the geometrical focus of its object-glass and requiring time for adjustment. At 0 $\frac{1}{2}$ ^h of July 26 the reading for bisection of the cross appeared on trial to be the same as before, and the measures were consequently not repeated. Between the two sets of bisections of the North mark the collimator moved a little about its horizontal axis, and I fear the readings may thereby be affected. The cross was bisected after the reversion under such

bad circumstances that the bisections were repeated at $5\frac{1}{2}^h$, when the cross had become pretty steady and distinct. The second bisections, appearing to be the more worthy of confidence, are made use of.

Illumination West.

Mean of 6 readings, micrometer-wire coinciding with <i>D</i>	^{r.} 24,209
..... 6 bisecting South mark	25,381
..... 6 bisecting North mark	21,549

Illumination East.

Mean of 6 readings, micrometer-wire bisecting North mark	^{r.} 26,816
..... 7 bisecting South mark	23,064
..... 6 bisecting South mark	23,047
..... 6 coinciding with <i>D</i>	24,209
Reading for line of collimation by South mark.....	24,214
..... North mark.....	24,183
Reading for true line of collimation	24,198
Reading for coincidence with <i>D</i>	24,209

Since the reading for coincidence with *D* is greater than that for the true line of collimation, the error of its collimation (Illumination East) is $+0''.011$, or $+0''.19$.

July 28, 19^h. The Transit was reversed. The Cross was steady and clear before the reversion, but so very unsteady and badly defined after reversion that the bisections were delayed. In a short time it became distinct and pretty steady, and the bisections were taken satisfactorily. The point of the image of the collimator's wire selected for bisection was not sufficiently definite, and the bisections are consequently a little uncertain. The wind shook the collimator, but it was well secured by fastening the brass arm (8 inches long) which carries the vernier of the setting circle, to the graduated limb of that circle, and at the same time screwing it tight on the axis of motion. The micrometer-reading for coincidence with *D* was inadvertently omitted after the reversion.

Illumination East.

Mean of 6 readings, micrometer-wire coinciding with <i>D</i>	^{r.} 24,205
..... 7 bisecting South mark	23,014
..... 6 bisecting North mark	21,513

Illumination West.

Mean of 8 readings, micrometer-wire bisecting North mark	^{r.} 26,960
..... 9 bisecting South mark	25,448
Reading for line of collimation by South mark.....	24,231
..... North mark.....	24,237
Reading for true line of collimation	24,234
Reading for coincidence with <i>D</i>	24,205

Hence the error of collimation of *D* (Illumination West) is $+0''.029$ or $+0''.49$.

July 31, 6^h. The Transit was reversed. The cross was well seen but was very unsteady. In other respects the circumstances were favorable. The coincidence with *D* and the bisection of the cross after the reversion, were taken by Mr Glaisher.

Illumination West.

Mean of 6 readings, micrometer-wire coinciding with <i>D</i>	^{r.} 24,171
..... 8 bisecting South mark	24,993
..... 6 bisecting North mark	18,509

Illumination East.

Mean of 7 readings, micrometer-wire bisecting North mark	^{r.} 29,260
..... 7 bisecting South mark	22,626
..... 6 coinciding with <i>D</i>	24,175

Reading for line of collimation by South mark.....	^{r.} 23,810
..... North mark.....	23,885
Reading for true line of collimation	23,847
Reading for coincidence with <i>D</i>	24,173

Hence the error of collimation of *D*, (Illumination East) is $+0^{\circ}.326$ or $+5''.56$.

The great change of collimation error and of the reading for coincidence with *D* was most probably caused by a blow of considerable violence which the eye-end of the Telescope received July 28, 23^h. August 1, 6^h, I shifted the wire-frame, and then found the mean of six readings for coincidence of the micrometer-wire with *D* to be 23,950, which is less than the former reading by $0^{\circ}.223$, or $3''.80$. Hence the error of collimation of *D* after the shifting of the wires became $5''.56 - 3''.80$, or $+1''.76$.

Sept. 8, 23^h. The Transit was reversed. The cross was very distinct and steady before the reversion, but subsequently became very unsteady and badly defined, on which account a large number of bisections were taken after the reversion. In other respects the circumstances were good.

Illumination East.

Mean of 6 readings, micrometer-wire coinciding with <i>D</i>	^{r.} 23,926
..... 8 bisecting South mark	22,526
..... 9 bisecting North mark	22,935

Illumination West.

Mean of 8 readings, micrometer-wire bisecting North mark	^{r.} 24,623
..... 11 bisecting South mark	24,948
..... 6 coinciding with <i>D</i>	23,927
Reading for line of collimation by South mark.....	23,737
..... North mark.....	23,779
Reading for true line of collimation	23,758
Reading for coincidence with <i>D</i>	23,927

Hence the error of collimation of *D* (Illumination West) $= -0^{\circ}.169$, or $-2''.88$.

Sept. 9, 4^h. The Transit was reversed under favorable circumstances. The cross before the reversion was not quite steady, but after the reversion it was beautifully steady and distinct.

Illumination West.

Mean of 6 readings, micrometer-wire coinciding with <i>D</i>	^{r.} 23,930
..... 6 bisecting South mark	24,984
..... 10 bisecting North mark	21,916

Illumination East.

Mean of 8 readings, micrometer-wire bisecting North mark	^{r.} 25,645
..... 8 bisecting South mark	22,595
..... 6 coinciding with <i>D</i>	23,926
Reading for line of collimation by South mark.....	23,790
..... North mark.....	23,781
Reading for true line of collimation	23,785
Reading for coincidence with <i>D</i>	23,928

Hence the error of collimation of *D* (Illumination East) $= +0^{\circ}.143$, or $+2''.44$.

The following were the nearly contemporaneous measures taken by means of the collimating eye-piece.

July 26, just before the reversion of the Transit, a small speck on one of the horizontal wires served as a point for bisection, first, by the micrometer-wire, and then by the image of the micrometer-wire. The mean of the micrometer readings for the two bisections is

evidently the micrometer reading for coincidence of the micrometer-wire with a vertical plane passing through the optical centre of the object-glass. The same operation was performed by means of another speck on the other horizontal wire.

Bisections of 1st point		Bisections of 2nd point	
By the micrometer wire.	By image of the micrometer wire.	By the micrometer wire.	By image of the micrometer wire.
23,748	24,833	23,986	24,548
23,698	24,829	23,988	24,569
23,742	24,816	23,980	24,569
Mean.....23,729	24,826	Mean.....23,985	24,562

Hence the reading for coincidence of the micrometer-wire with its image is $24^r,278$ by the first point, and $24^r,274$ by the other. The mean between these two results, viz. $24^r,276$, applies to a position midway between the horizontal wires, where the transits are usually taken. The reading for coincidence with D was at the same time $24^r,209$. Hence the distance of D from the vertical meridian plane passing through the optical centre of the object-glass was $0^r,067$, or $1'',14$. Also as the micrometer readings increase in going from the Illumination end of the axis, which at the time was *West*, it follows that D was $1'',14$ to the *West* of the vertical plane.

After the reversion on the same day (July 26), another set of measures, which it is unnecessary to give in detail, were taken in precisely the same manner. The resulting micrometer reading for coincidence with the vertical plane was $24^r,259$; and the reading for coincidence with D being $24^r,209$, it follows that D was $0^r,050$, or $0'',85$ to the *East* of the vertical plane.

July 28, 18^h , the measures were taken in the same manner as on July 26, with the following results.

Illumination East.

Micrometer reading for coincidence with vertical plane	$24^r,210$
..... with D	$24,205$

Illumination West.

Micrometer reading for coincidence with vertical plane	$24^r,266$
..... with D	$24,205$

As the micrometer readings increase in going from the Illumination end, it appears that D was $0^r,005$, or $0'',09$, to the *East* of the vertical plane before the reversion, and $0^r,061$, or $1'',04$, to the *West* of the same after the reversion.

July 31, $5\frac{1}{2}^h$, just before the reversion, the Illumination End of the axis being *West*, the following measures were taken with the collimating eye-piece.

The micrometer-wire was so placed that its image, the wire D , the image of D , and the micrometer-wire itself, were in order of succession, and by the judgment of the eye the three spaces between the four lines were made equal. By this arrangement the interval between the micrometer-wire and D was *four* times the distance of D from the vertical plane through the optical centre of the object-glass. The mean of six readings for the position of the micrometer-wire agreeing well with each other, gave $23^r,094$; and the micrometer reading for coincidence with D was $24^r,173$. Hence one-fourth the difference, or $0^r,270$, which in arc is $4'',61$, is the distance of D from the vertical plane. Also as the coincidence reading for D is the greater, and the Illumination End of the axis was *West*, it follows that D was to the *East* of the vertical plane.

After the reversion the interval of D from its image was too great to admit of safely employing the above method, and the bisections were consequently made as on July 26. The following was the result.

Illumination East.

Micrometer reading for coincidence with vertical plane	^{r.} 23,778
..... with <i>D</i>	24,173

Hence *D* was 0',395, or 6'',74 to the *West* of the vertical plane.

Sept. 8, just before and after the reversion, the distances of *D* from the vertical plane were measured as on July 31, with the following results.

Illumination East.

Micrometer reading, the three spaces being made equal.....	^{r.} 23,416
Micrometer reading for coincidence with <i>D</i>	23,926
One-fourth the difference between the two readings	0,128

Illumination West.

Micrometer reading, the three spaces being made equal	^{r.} 23,474
Micrometer reading for coincidence with <i>D</i>	23,929
One-fourth the difference between the two readings	0,114

Hence *D* was 0',128, or 2'',18 to the *West* of the vertical plane before the reversion, and 0',114, or 1'',95, to the *East* of it after the reversion.

Sept. 9, just before and after the reversion, measures were taken as on Sept. 8, resulting as follows.

Illumination West.

Micrometer reading, the three spaces being made equal.....	^{r.} 23,505
Micrometer reading for coincidence with <i>D</i>	23,930
One-fourth the difference between the two readings	0,106

Illumination East.

Micrometer reading, the three spaces being made equal.....	^{r.} 23,456
Micrometer reading for coincidence with <i>D</i>	23,926
One-fourth the difference between the two readings	0,117

Hence *D* was 0',106, or 1'',81, to the *East* of the vertical plane before the reversion, and 0',117, or 2'',00 to the *West* of it after the reversion.

Now let the following substitutions be made:

- l_w = True Level Error, Illumination *West*, Telescope directed to the Nadir, that is, the angular elevation of the West end of the axis.
- c = Collimation Error of *D*, Illumination *West*.
- a = Deviation of *D* from the vertical plane towards the *East*, as measured by the collimating eye-piece, Illumination *West*.
- l_e = True Level Error, Illumination *East*, Telescope directed to the Nadir.
- $-c$ = Collimation Error of *D*, Illumination *East*.
- b = Deviation of *D* from the vertical plane towards the *East*, Illumination *East*.
- L_w = The uncorrected Level Error, Illumination *West*, as determined by the Spirit Level, the Telescope being horizontal and directed southward.
- L_e = The same, Illumination *East*.

Then, since the deviation of *D* from the vertical plane towards the *East*, is clearly equal to the Level Error diminished by collimation error, we have,

$$l_w = a + c, \quad l_e = b - c.$$

Hence the following Table of values may be readily derived from the foregoing data, the values of L_w and L_e being taken from the Table of Level Errors observed in 1844, which is given under the head of *Level Error* in this Introduction.

Day of Reversion.	a	b	c	l_w	l_e	L_w	L_e	$l_w - L_w$	$l_e - L_e$
July 26	-1,14	+0,85	-0,19	-1,33	+1,04	-1,50	-0,06	+0,17	+1,10
28	-1,04	+0,09	+0,49	-0,55	-0,40	-1,92	-0,83	+1,37	+0,43
31	+4,61	-6,74	-5,56	-0,95	-1,18	-2,59	-1,30	+1,64	+0,12
Sept. 8	+1,95	-2,18	-2,88	-0,93	+0,70	-1,52	-0,14	+0,55	+0,88
9	+1,81	-2,00	-2,44	-0,63	+0,44	-1,40	-0,48	+0,77	+0,92

The values of $l_w - L_w$ and $l_e - L_e$ are somewhat discordant, owing probably to the unfavorable circumstances under which some of the observations were made. Those taken on Sept. 8 and 9 appear to be the best. The mean values of $l_w - L_w$ and $l_e - L_e$ which have been adopted, are respectively +0",89 and +0",69. Thus we have,

Error of collimation of D (Illumination West) = $c = l_w - a = L_w - a + 0",89$.

Error of collimation of D (Illumination East) = $-c = l_e - b = L_e - b + 0",69$.

Since the mean of all the wires is nearer to the Illumination end of the axis than D by 1",02, the following are the formulæ for the error of collimation of the mean of the wires, inclusive of the correction -0",18 for diurnal aberration:

Error of collimation of the mean of the wires (Illumination West) = $L_w - a + 1",73$.

Error of collimation of the mean of the wires (Illumination East) = $L_e - b - 0",51$.

The collimation errors were deduced throughout the year according to these formulæ, with the exception of those employed from the beginning of the year to March 25, which were determined in the usual manner by the reversion of Jan. 6. The collimating eye-piece was first made use of on June 8. The micrometer reading for coincidence with the vertical plane through the optical centre of the object-glass, found on that day as on July 31, was 24,341, and the reading for coincidence with D , 24,217. Hence, the Illumination being West, the value of a is -0",124, or -2",11. Also by levelling on June 10, $L_w = -1",89$. Hence concluded error of collimation = $-1",89 + 2",11 + 1",73 = +1",95$, which is used from March 25.

The collimation error derived from the values of a and L_w on July 26 in the above Table is $-1",50 + 1",14 + 1",73$, or $+1",37$, which is used from July 10. That derived from the values of b and L_e on the same day in the same Table, is $-0",06 - 0",85 - 0",51$, or $-1",42$, which is used after the reversion of July 26.

The collimation error adopted after the accidental displacement of the wire-frame (July 28, 23^b), was deduced from the observations made with the collimating eye-piece and Spirit Level before the reversion of July 31, according to which $a = +4",61$, $L_w = -2",59$, and the concluded collimation error = $-2",59 - 4",61 + 1",73 = -5",47$. The observations taken after the reversion give, $b = -6",74$, $L_e = -1",30$, and concluded collimation error = $-1",30 + 6",74 - 0",51 = +4",93$. But as the wire-frame was adjusted (Aug. 1, 6^b) so as to diminish the reading for coincidence with D by +3",80, the collimation error (Illumination being East) was diminished by the same quantity. Hence collimation error adopted from Aug. 1 = $+4",93 - 3",80 = +1",13$.

The collimation error +1",53 used from August 17, was derived from the values of b and L_e obtained on Sept. 8; and that used from Sept. 10, viz. +1",01, was derived from the values of b and L_e obtained on Sept. 9.

Dec. 15, 23^b, the collimation error was determined by the collimating eye-piece as follows:

Illumination East.

Micrometer reading for coincidence with vertical plane	23,925
..... with D	23,889

Hence, as D was 0",036, or 0",61, to the *East* of the vertical plane, $b = + 0",61$. And by Table of Level Errors, $L_e = + 0",94$. Consequently concluded collimation error $= + 0",94 - 0",61 - 0",51 = - 0",18$, which is used from Nov. 4 to the end of the year.

The values of collimation error adopted in the reduction of the transits, and the days on which new values are first used, are stated in the space immediately below the columns.

The correction to the observed time of each transit is in seconds of time,

$$\frac{1}{15} \times \text{collimation error} \times \text{cosecant of N.P.D.},$$

the N.P.D. being considered negative when the star passes below the pole.

Level Error.—The angular deviation of the axis of revolution of the Transit from a horizontal plane is found by applying to the pivots a Spirit Level, furnished with a cross-level adjustment, and with graduated scales for reading off the positions of the extremities of the bubble. It is the practice to reverse the level five times, and thus obtain six eastern and six western readings, the scales being first disposed in positions convenient for reading off, which they retain during the whole of the operation. In the graduation of each scale the numbers increase in the direction from the middle of the bubble towards the extremity. Hence the algebraic *excess* of the sum of the western above the sum of the eastern readings, divided by the whole number of readings, is the measure, in degrees of the scales, of the *elevation* of the west end of the axis above a horizontal plane. This is converted into angular measure by multiplying by 1",3, the value of 1° of the scales. Since stars above the pole require a positive correction to their time of transit when the west end of the axis is the more elevated, the result thus obtained is the Level Error with the sign proper for the application of that correction.

The correction applied to the observed time of each transit, previously corrected for error of collimation, is, in seconds of time,

$$\frac{1}{15} \times \text{level error} \times \text{cosine of Zen. Dist.} \times \text{cosecant of N.P.D.},$$

the N.P.D. being negative when the star is below the pole.

The levelling is commonly performed once in a week, and the determination is used from the third or fourth day previous. The values of level error adopted in the reduction of the transits, and the days on which they are first used, are stated in the space immediately below the columns.

The following Table contains a list of all the Level Errors obtained in 1844, with the times of levelling, position of the instrument, and Temperature in degrees of Fahrenheit, as shewn by a Thermometer in the Transit Room. In all the levellings the Telescope was horizontal, and the object-glass southward.

Level Errors in 1844.

Time of Levelling.	Level Error.	Position of Illum. End of Axis.	Temperature.	Time of Levelling.	Level Error.	Position of Illum. End of Axis.	Temperature.	Time of Levelling.	Level Error.	Position of Illum. End of Axis.	Temperature.
Jan. 4. 23 $\frac{1}{2}$	+2,77	East	50	May 5. 22	-1,14	West	57	Aug. 25. 23	-0,61	East	60
5. 1	+2,12	—	50	12. 22	-1,18	—	60	Sept. 1. 22	+0,33	—	62
22. 22 $\frac{1}{2}$	+0,82	West	40	19. 22 $\frac{1}{2}$	-1,86	—	51	8. 22 $\frac{1}{2}$	-0,14	—	62
28. 21 $\frac{1}{2}$	+0,59	—	42	26. 23	-1,47	—	49	8. 23 $\frac{1}{2}$	-1,52	West	63
Feb. 4. 22	+0,40	—	32	June 3. 21	-1,16	—	56	9. 3 $\frac{1}{2}$	-1,40	—	63
11. 23	+0,81	—	33	10. 7	-1,89	—	63	9. 4 $\frac{1}{2}$	-0,48	East	63
23. 2	+0,70	—	34	22. 2	-1,48	—	68	15. 22 $\frac{1}{2}$	+0,42	—	64
27. 22	+0,64	—	38	July 17. 2 $\frac{1}{2}$	-1,99	—	62	22. 22	-0,39	—	55
Mar. 4. 1 $\frac{1}{2}$	+0,65	—	42	21. 22	-1,29	—	63	29. 22 $\frac{1}{2}$	-0,18	—	52
13. 2	+0,47	—	41	25. 19	-1,50	—	70	Oct. 6. 22	-0,03	—	53
20. 21 $\frac{1}{2}$	-0,33	—	37	26. 5 $\frac{1}{2}$	-0,06	East	70	22. 21	-0,03	—	48
28. 22	+0,16	—	48	28. 18 $\frac{1}{2}$	-0,83	—	61	27. 22	+0,22	—	48
Apr. 2. 22	-0,10	—	54	28. 19 $\frac{1}{2}$	-1,92	West	61	Nov. 10. 22	-0,09	—	44
7. 22 $\frac{1}{2}$	-0,81	—	55	31. 5 $\frac{3}{4}$	-2,59	—	60	17. 23	+0,77	—	51
14. 23	-0,81	—	54	31. 6 $\frac{3}{4}$	-1,30	East	60	25. 22	+0,55	—	38
22. 22	-0,95	—	55	Aug. 13. 23	-0,59	—	58	Dec. 15. 23	+0,94	—	36
28. 22	-1,44	—	53	18. 22	-0,26	—	60				

When the levelling of Jan. 4 was taken, the amount of counterpoise pressure was the same that it had been since March 23, 1843. Before that of Jan. 5 the counterpoises were taken off, and were not afterwards replaced.

The measures of the excess of the radius of the pivot at the illuminated end of the axis above the radius of the other, as derived, by calculating in the manner explained in p. xxviii. of Vol. X., from the reversions on July 26, July 28, July 31, Sept. 8, and Sept. 9, are respectively, $-0'',33$, $-0'',25$, $-0'',30$, $-0'',32$, $-0'',21$. These indicate an increase in the apparent difference of size of the pivots since the beginning of 1839, when, according to the discussion contained in pages vi. and vii. of the Introduction to the Observations of 1839, the measure of that difference was $-0'',08$.

Having reason to conclude that the pivots had deviated by constant wear from the cylindrical form to a sensible amount, I observed as follows to ascertain the change of Level Error corresponding to different elevations of the Telescope, so far as this could be done by the application of the Spirit Level, and to correct for the effect of such irregularity on the observed times of transit.

1844, Jan. 5, the Telescope was first placed in a horizontal position, with the object-glass southward. The Spirit Level was applied with Cross-Level East, and remained on the pivots while the Telescope was gently turned to positions separated by 5° of Zenith Distance. After turning it to the least zenith distance which the frame of the Level would admit of its reaching, it was brought back by the same degrees to the horizontal position, and for each zenith distance the Level was read off after adjusting the Cross-Level. The illuminated end of the axis was East. The Temperature was at 51° of Fahrenheit. Similar observations were taken on Jan. 6, the object-glass being northward, the illuminated end of the axis East, the Cross-Level East, and the Temperature at 48° . The following Table contains the two series of observations.

Zenith Distance South.	East Reading (1st time).	East Reading (2d time).	West Reading (1st time).	West Reading (2d time).	Mean Excess of W. Readings.	Zenith Distance North.	East Reading (1st time.)	East Reading (2d time).	West Reading (1st time).	West Reading (2d time).	Mean Excess of W. Readings.
0°	d.	d.	d.	d.	d.	0°	d.	d.	d.	d.	d.
90	5,6	5,7	6,6	6,8	+1,05	90	11,2	11,7	8,7	9,2	-2,50
85	5,3	5,2	6,9	7,2	+1,80	85	10,7	11,5	9,0	9,3	-1,95
80	5,1	5,1	7,1	7,2	+2,05	80	10,6	11,4	9,1	9,5	-1,70
75	5,3	5,1	6,9	7,1	+1,80	75	10,7	11,3	9,0	9,4	-1,80
70	5,1	5,1	7,0	7,2	+2,00	70	10,8	11,2	9,1	9,4	-1,75
65	5,0	5,0	7,0	7,2	+2,10	65	10,7	11,1	9,2	9,6	-1,50
60	4,7	5,0	7,5	7,2	+2,50	60	10,5	11,0	9,5	9,6	-1,20
55	4,3	4,3	7,9	7,8	+3,55	55	10,3	10,7	9,8	9,8	-0,70
50	4,3	4,2	8,0	8,0	+3,75	50	10,2	10,5	10,0	10,0	-0,35
45	4,1	4,7	8,1	7,7	+3,50	45	10,2	10,5	9,9	10,0	-0,40
40	4,7	4,8	7,5	7,5	+2,75	40	10,4	10,5	9,8	9,8	-0,65

1845, March 8, observations were made in precisely the same manner, which, as they have been combined with the above in obtaining corrections of the observed times of transit for the forms of the pivots, are here subjoined. The illuminated end of the axis was *West*, and the Cross-Level was *East*. The Temperature was at 37° .

Zenith Distance South.	East Reading (1st time).	East Reading (2d time).	West Reading (1st time).	West Reading (2d time).	Mean Excess of W. Readings.	Zenith Distance North.	East Reading (1st time).	East Reading (2d time).	West Reading (1st time).	West Reading (2d time).	Mean Excess of W. Readings.
$^{\circ}$	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	$^{\circ}$	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>
90	12,3	11,2	12,8	12,0	+0,65	90	11,4	11,1	12,1	11,7	+0,65
85	12,4	11,5	12,6	11,9	+0,30	85	11,6	11,3	12,0	11,5	+0,30
80	12,3	12,0	12,5	11,5	-0,15	80	11,6	11,1	11,9	11,7	+0,45
75	12,5	12,0	12,1	11,5	-0,45	75	11,0	11,0	12,1	11,9	+1,00
70	12,4	12,1	12,0	11,4	-0,55	70	11,0	11,1	12,0	11,7	+0,80
65	12,5	12,1	11,9	11,4	-0,65	65	11,1	11,1	12,0	11,7	+0,75
60	12,3	12,5	12,0	11,1	-0,85	60	11,0	11,3	12,0	11,5	+0,60
55	12,6	12,8	11,5	11,0	-1,45	55	11,4	11,8	11,5	11,0	-0,35
50	12,9	12,9	11,2	11,0	-1,80	50	11,9	11,9	11,0	11,0	-0,90
45	12,8	12,9	11,2	11,0	-1,75	45	11,8	11,8	11,0	11,0	-0,80
40	12,8	12,8	11,0	11,0	-1,80	40	11,8	11,5	11,0	11,2	-0,55

The mean excesses of the West Readings in the above Tables vary in each instance with the Zenith Distance by a kind of law, clearly indicating a sensible effect of the forms of the pivots. The increment of level error produced by moving the Telescope from the horizontal position to a given zenith distance is calculated by subtracting the excess of West Reading for that zenith distance above the excess for zenith distance 90° , *halving* the difference, multiplying by 1,3 to convert the scale divisions into angular measure, and then multiplying by $\frac{7}{13}$ because the cosecant of the angle of the Pier Y's has to the cosecant of the angle of the Level Y's the ratio of 7 to 6: or, by simply multiplying the difference by 0,35. The adopted increments of level error for Zenith Distances South and Illumination East, are the means of the increments calculated for Zenith Distances South and Illumination East, and the *decrements* calculated for Zenith Distances South and Illumination West. A like rule gives the adopted increments for Zenith Distances *North* and Illumination East. The increments for Illumination *West* are assumed to be the same for the same Zenith Distances as those for Illumination East, with signs changed. In accordance with these principles the numbers in the subjoined Table were formed. Probably it would have been more correct to combine the change of level error for a given zenith distance *South* or *North*, Illumination East, with the change of level error for the same zenith distance *North* or *South*, Illumination West, because in the two cases the Y's of the Piers and of the Level are in contact with the same points of the pivots.

Zenith Distance South.	Increment of Excess of W. Reading Illum. E.	Decrement of Excess of W. Reading Illum. W.	Mean.	Mean Increment of Level Error Illum. E.	Zenith Distance North.	Increment of Excess of W. Reading Illum. E.	Decrement of Excess of W. Reading Illum. W.	Mean.	Mean Increment of Level Error Illum. E.
$^{\circ}$	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>''</i>	$^{\circ}$	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>
90	+0,00	+0,00	+0,00	+0,00	90	+0,00	+0,00	+0,00	+0,00
85	+0,75	+0,35	+0,55	+0,19	85	+0,55	+0,35	+0,45	+0,16
80	+1,00	+0,80	+0,90	+0,31	80	+0,80	+0,20	+0,50	+0,17
75	+0,75	+1,10	+0,92	+0,32	75	+0,70	-0,35	+0,18	+0,06
70	+0,95	+1,20	+1,07	+0,37	70	+0,75	-0,15	+0,30	+0,11
65	+1,05	+1,30	+1,17	+0,41	65	+1,00	-0,10	+0,45	+0,16
60	+1,45	+1,50	+1,47	+0,51	60	+1,30	+0,05	+0,68	+0,24
55	+2,50	+2,15	+2,32	+0,81	55	+1,80	+1,00	+1,40	+0,49
50	+2,70	+2,45	+2,57	+0,90	50	+2,15	+1,55	+1,85	+0,65
45	+2,45	+2,40	+2,42	+0,85	45	+2,10	+1,45	+1,78	+0,62
40	+1,70	+2,45	+2,08	+0,73	40	+1,85	+1,20	+1,53	+0,54

The adopted level error for the horizontal position of the Telescope was inferred from the level-error given immediately by the spirit-level, by applying a correction which was thus investigated. On each occasion on which levellings were taken immediately before and after the reversion of the instrument, a correction of the indication of the Level has been calculated (in the manner explained in Vol. X. p. xxviii.) on the supposition that the pivots were cylindrical but of unequal size. The following is a list of the results in continuation of those given in page vi. of the Introduction to the Volume for 1839.

Date of Reversion.	Correction Illum. E.	Date of Reversion	Correction Illum. E.	Date of Reversion.	Correction Illum. E.
1839, April 9	+0,02	1841, Feb. 23	(-0,58)	1842, Dec. 21	-0,23
June 6	-0,18	Feb. 23	(-1,00)	1843, April 24	(-0,58)
Sept. 19	-0,06	June 15	-0,30	July 14	+0,06
1840, Jan. 10	-0,23	Oct. 6	-0,21	Oct. 29	-0,47
May 7	(+0,85)	Dec. 30	-0,16	1844, July 26	-0,33
July 28	(-1,58)	1842, Feb. 23	-0,17	July 28	-0,25
Oct. 27	-0,25	May 27	-0,15	July 31	-0,30
1841, Feb. 22	-0,29	Sept. 24	-0,21	Sept. 8	-0,32
Feb. 23	-0,08	Sept. 24	-0,24	Sept. 9	-0,21

The values in brackets are not taken into account, being affected by an irregularity the cause of which is explained in the Introduction to Vol. XIII. p. vi. The eighteen values from 1840, Oct. 27 to 1844, Sept. 9 give for a mean result $-0'',22$, which is adopted. Hence we deduce, by reference to the foregoing Table, the following corrections, for different Zenith Distances, of the Level Error given by the spirit-level. The correction is assumed to be the same for the horizontal position, whether the Telescope be directed Northward or Southward.

Zenith Distance South.	Correction Illum. E.	Zenith Distance North.	Correction Illum. E.
90	-0,22	90	-0,22
85	-0,03	85	-0,06
80	+0,09	80	-0,05
75	+0,10	75	-0,16
70	+0,15	70	-0,11
65	+0,19	65	-0,06
60	+0,29	60	+0,02
55	+0,59	55	+0,27
50	+0,68	50	+0,43
45	+0,63	45	+0,40
40	+0,51	40	+0,32

As the increment of Level Error for any Zenith Distance appears to be nearly proportional to the frequency with which the Telescope is directed to that Zenith Distance in the course of observing, the correction corresponding to 0° of Zenith Distance has been assumed to be the same as for Zenith Distance 75° S., viz. $+0'',10$; and for Zenith Distances between 40° S. and 40° N., the values have been simply interpolated. From the corrections of Level Error, adopted on the principles that have now been explained, the following Table of corrections (in time) of the observed times of transit was computed.

North Polar Distance.	Correction Illumination East.	North Polar Distance.	Correction Illumination East.	North Polar Distance.	Correction Illumination East.	North Polar Distance.	Correction Illumination East.
-52	$-0,00$	-13	$-0,08$	$+16$	$+0,05$	$+43$	$+0,02$
-22	$-0,00$	-12	$-0,09$	$+17$	$+0,05$	$+67$	$+0,02$
-21	$-0,01$	-11	$-0,10$	$+18$	$+0,04$	$+68$	$+0,03$
-20	$-0,02$	-10	$-0,11$	$+21$	$+0,04$	$+84$	$+0,03$
-19	$-0,02$	$+10$	$+0,08$	$+22$	$+0,03$	$+85$	$+0,02$
-18	$-0,03$	$+11$	$+0,07$	$+27$	$+0,03$	$+95$	$+0,02$
-17	$-0,04$	$+12$	$+0,07$	$+28$	$+0,02$	$+96$	$+0,01$
-16	$-0,05$	$+13$	$+0,07$	$+34$	$+0,02$	$+103$	$+0,01$
-15	$-0,06$	$+14$	$+0,06$	$+35$	$+0,01$	$+104$	$+0,00$
-14	$-0,07$	$+15$	$+0,06$	$+42$	$+0,01$	$+128$	$+0,00$

This Table is so constructed that the correction for an N.P.D. expressed in integral degrees is given to the nearest hundredth of a second. The corrections for N.P.D. between -10° and $+10^\circ$, must be obtained by special calculation. The values for Polaris, δ Ursæ Minoris, and 51 (Hev.) Cephei above Pole are, respectively $+0'',57$, $+0'',26$, $+0'',32$; those for the same stars below Pole are, $-0'',58$, $-0'',27$, $-0'',33$.

The above corrections have all been applied with signs changed when the Illumination was *West*. All the observed times have been thus corrected previous to the determination of Azimuth Error.

Azimuth Error. The angle by which the plane of motion of the true line of collimation, (supposing the level error corrected), deviates from the plane of the meridian, has been generally found by two or more transits of Polaris, or δ Ursæ Minoris, alternately above and below the pole, and as often as possible, consecutive. When this method could not be employed, the azimuth error has been deduced from a comparison of a single transit of one of these stars with the transit of a known star above and distant from the pole.

The formulæ of calculation applicable to these methods are obtained as follows. Let A, A' be the apparent right ascensions of two known stars, t, t' their times of transit as shewn by the clock, corrected for collimation and level errors, τ the clock's loss in the interval between the transits, h, h' , the coefficients of azimuth error, calculated by the formula, coefficient = $\frac{1}{15} \sin. \text{Zen. Dist.} \times \text{cosec. N.P.D.}$, and therefore positive except between the zenith and the pole, and z the azimuth error in seconds of space, considered positive when it causes the plane of motion of the line of collimation to deviate on the South side of the zenith towards the East. Then

$$A' - A = t' + h'z + \tau - (t + hz),$$

$$\text{or } z = \frac{A' - A - (t' - t) - \tau}{h' - h},$$

which is the general formula for azimuth error. That it may be safely used, the denominator $h' - h$ must be large, and it is consequently necessary that one at least of the stars should be near the pole.

When two known stars, one or both near the pole, are employed, $A' - A$ is the difference of their assumed apparent R.A., and τ is inferred from the differences of the uncorrected times of transit of any southern star observed on two days near the time of the observations made use of for azimuth error.

If two observations of the same circumpolar star be used, one above and the other below the pole, and if ϵ be the increase of its R.A. in the interval between the observations, $A' - A = 12^h + \epsilon$, and

$$z = \frac{12^h + \epsilon - (t' - t) - \tau}{h' - h},$$

which is independent of any assumed R.A. of the star.

When three equidistant transits of a circumpolar star, alternately above and below the pole, have been obtained, there will be another equation like the preceding, in which ϵ and τ have nearly the same values; and if t'' be the time of the third transit, corrected for errors of collimation and level, the two equations give

$$z = \frac{(t'' - t') - (t' - t)}{2(h' - h)},$$

which equation is independent both of the R.A. of the stars, and of their change of R.A. and the clock's rate.

The numerical computation from the preceding formulæ is performed as follows, the azimuth error being always a small quantity. When two stars are used, the seconds of transit of the first, corrected for collimation and level errors, are increased by the seconds of the sidereal interval between the transits, as derived from the seconds of the assumed R.A. of the stars, and the seconds of transit of the second, by the loss of the clock in that interval. The algebraic excess of the former sum (care being taken to add or subtract 60^s that the difference may not exceed a smaller number of seconds) being divided by $h' - h$ gives the azimuth error with its proper sign. The process is the same in the case of two

transits of the same circumpolar star, the algebraic excess of the star's R.A. at the second transit above its R.A. at the first, being added to the seconds of the first transit.

When there are three consecutive transits of the same circumpolar star, the corrections for interval of transits and clock's rate are omitted, and the mean of the two results obtained according to the above rule from the first and second, and from the second and third, is adopted.

When more than three consecutive transits have been observed, a value of the azimuth error is deduced from the first, second, and third; another from the second, third, and fourth; and so on. If the different values are nearly equal, the mean of all is used; when they differ considerably they are used separately or in groups.

The following Table contains a list of the Azimuth Errors used in 1844, with the data employed in calculating them, by means of which they may be readily verified.

Azimuth Errors in 1844.

Approximate Mean Time of Observation.	Star.	Seconds of Transit corrected for Collimation and Level Errors.	Seconds of the Star's Assumed R.A.	Correction for rate of Clock.	Excess of Seconds for first Star.	Value of $h'-h$.	Azimuth Error.	Remarks.
Jan. 1. 5 6 8	α Andromedæ Polaris α Ceti	44,25 59,16 32,81	21,02 33,70 9,76		- 2,23 + 2,41	- 1,515 + 1,534	" + 1,47 + 1,57	The mean of these, viz. +1'',52 is used, the Clock's rate not being taken into account.
10. 10 11	α Orionis δ Ursæ Min. SP.	7,45 23,36	46,17 8,86	0,00	+ 6,78	+ 0,692	+ 9,80*	The Clock's rate was small.
14. 23 23	δ Ursæ Minoris β Lyræ	34,66 38,17	9,21 18,63	0,00	+ 5,91	+ 0,660	+ 8,95	
22. 9 10 11	β Tauri δ Ursæ Min. SP. Pollux	47,30 20,47 7,17	28,84 9,80 48,74		+ 7,79 - 7,76	+ 0,708 - 0,708	+ 11,00 + 10,96	The mean of these is used, and the Clock's rate is not considered.
26. 9 10 11	Rigel δ Ursæ Min. SP. Pollux	21,57 21,18 5,79	4,75 10,47 48,76		+ 6,11 - 6,32	+ 0,680 - 0,708	+ 8,98 + 8,93	The mean, viz. +8'',95 is used, the Clock's rate being neglected.
28. 22 29. 10	δ Ursæ Minoris δ Ursæ Min. SP.	34,45 19,91	10,87 10,95	+ 0,23	+ 14,39	+ 1,373	+ 10,48	
31. 22 Feb. 1. 9	δ Ursæ Minoris δ Ursæ Min. SP.	34,11 19,78	11,33 11,41	- 0,11	+ 14,52	+ 1,373	+ 10,57	
2. 22 3. 9	δ Ursæ Minoris δ Ursæ Min. SP.	35,80 20,49	11,64 11,74	- 0,11	+ 15,52	+ 1,373	+ 11,30	
8. 9 21	δ Ursæ Min. SP. δ Ursæ Minoris	24,93 38,98	12,93 13,05	- 0,05	- 13,88	- 1,373	+ 10,11	
16. 9 9	δ Ursæ Min. SP. Sirius	27,32 36,18	14,82 18,80		- 4,88	- 0,674	+ 7,24	Clock's rate small.
20. 7 8	α Orionis δ Ursæ Min. SP.	13,35 37,95	45,87 16,00	+ 0,01	+ 5,52	+ 0,692	+ 7,98	
Mar. 1. 1 2	α Andromedæ Polaris	49,70 31,83	20,43 51,97	+ 0,02	- 10,59	- 1,515	+ 6,99	

* On Jan. 5, at 1^h, the counterpoises were taken off. This with the effect of the reversion on Jan. 6, may have caused some change of azimuth error. The value +8'',53, used on Jan. 5 and 6, was deduced from the bisections of Grantchester cross made at the reversion of Jan. 6, the cross being assumed to be 14'',55 West of the meridian. The value found on Jan. 1, is probably too small: that of Dec. 12, 1843 was +7'',07.

Approximate Mean Time of Observation.	Star.	Seconds of Transit corrected for Colli- mation and Level Errors.	Seconds of the Star's Assumed R.A.	Correction for rate of Clock.	Excess of Seconds for first Star.	Value of $h'-h$.	Azimuth Error.	Remarks.
Mar. 5. 7 7	δ Ursæ Min. SP. Sirius.	42,22 45,03	20,39 18,53	0,00	- 4,67	- 0,674	+ 6,92	
11. 7 19 12. 7	δ Ursæ Min. SP. δ Ursæ Minoris δ Ursæ Min. SP.	40,71 51,72 39,20			- 11,01 + 12,52	- 1,373 + 1,373	+ 8,57	
26. 12 13	β Leonis Polaris SP.	17,61 42,06	8,93 44,88	+ 0,06	+ 11,44	+ 1,549	+ 7,38	
28. 13 29. 1	Polaris SP. Polaris	38,14 4,34	44,68 44,61	+ 0,60	- 26,87	- 3,074	+ 8,74	
Apr. 1. 0 12 2. 0	Polaris Polaris SP. Polaris	5,65 32,67 4,46			+ 32,98 - 31,79	+ 3,074 - 3,074	+ 10,53	
10. 0 12	Polaris Polaris SP.	46,54 29,89	45,13 45,16	+ 0,50	+ 16,18	+ 3,074	+ 5,26*	The Temperature at noon of April 10 was at 65°.
16. 23 17. 11	Polaris Polaris SP.	42,12 21,25	46,08 46,23	+ 0,48	+ 20,54	+ 3,074	+ 6,68	
22. 23 23. 11	Polaris Polaris SP.	38,72 16,59	48,17 48,34	+ 0,52	+ 21,78	+ 3,074	+ 7,09	The mean results of the observa- tions with and without the Micro- meter are made use of.
28. 23 29. 11 23	Polaris Polaris SP. Polaris	34,77 8,69 35,51			+ 26,08 - 26,82	+ 3,074 - 3,074	+ 8,60	
May 6. 10 22	Polaris SP. Polaris	7,93 32,36	53,73 53,96	+ 0,52	- 24,72	- 3,074	+ 8,04	
10. 10 22	Polaris SP. Polaris	6,81 29,88	55,47 55,69	+ 0,56	- 23,41	- 3,074	+ 7,61	The mean result of the observa- tions of Polaris with and without the Micrometer are made use of.
17. 9 21 18. 9	Polaris SP. Polaris Polaris SP.	0,27 27,42 1,30			- 27,15 + 26,12	- 3,074 + 3,074	+ 8,66	
31. 8 8	Polaris SP. Spica	57,28 3,91	9,29 2,12	0,00	- 13,80	- 1,530	+ 9,02	
June 13. 20 14. 8	Polaris Polaris SP.	18,31 56,27	19,72 20,17	+ 0,44	+ 22,05	+ 3,074	+ 7,17	
July 11. 6 7	Polaris SP. Arcturus	58,19 59,37	42,61 35,57	+ 0,02	+ 8,20	- 1,552	+ 5,28	The mean between this and the preceding, viz. + 6'',22, is used on June 29 and July 1.
17. 10 18. 5	α Ophiuchi Polaris SP.	3,37 55,15	45,39 48,22	+ 0,81	+ 10,24	+ 1,546	+ 6,62	
22. 22 23. 10	δ Ursæ Min. SP. δ Ursæ Minoris	52,22 58,03	41,71 41,61	+ 0,46	- 6,37	- 1,373	+ 4,64	
Aug. 10. 9 21	δ Ursæ Minoris δ Ursæ Min. SP.	38,79 29,62	36,67 36,51	+ 0,43	+ 8,58	+ 1,373	+ 6,25	See note † below.
20. 8 22. 20	δ Ursæ Minoris δ Ursæ Min. SP.	24,51 14,61	33,45 32,50	+ 2,72	+ 6,23	+ 1,373	+ 4,54	

* The small values of the azimuth error in the month of April, which differ little from the values obtained in the heat of summer, I can account for only by the generally high temperature that prevailed in that month.

† By bisections of Grantchester cross made at the reversions of the Instrument on July 26, 28, and 31, the azimuth error (Illumination West) was found to be + 5'',63, + 6'',16, + 5'',00, the cross being assumed to be 14'',55 West of the meridian. By the same bisections, the azimuth error (Illumination East) was + 5'',08, + 6'',26, + 6'',28. The mean of these three, viz. + 5'',87, is used from July 27.

Approximate Mean Time of Observation.	Star.	Seconds of Transit corrected for Collimation and Level Errors.	Seconds of the Star's Assumed R.A.	Correction for rate of Clock.	Excess of Seconds for first Star.	Value of $h-h_0$.	Azimuth Error.	Remarks.
Aug. 27. ^{h.} 3 3	Polaris SP. Spica	^{s.} 49,32 40,90	16,58 1,26	^{s.} 0,00	^{s.} - 6,90	- 1,530	" + 4,51	
29. 3 15 30. 2	Polaris SP. Polaris Polaris SP.	49,51 56,17 45,94			- 6,66 + 10,23	- 3,074 + 3,074	+ 2,75	
Sept. 7. 5 7 9	Antares δ Ursæ Minoris α Capricorni	22,55 57,65 55,67	54,71 26,55 28,05		- 3,26 + 3,48	- 0,707 + 0,696	+ 4,61 + 5,00	The mean of these, viz. +4",80 is used, the Clock's rate being neglected.
18. 13 19. 1	Polaris Polaris SP.*	51,22 37,19	26,98 27,17	+ 0,42	+ 13,80	+ 3,074	+ 4,49	
18. 13 20. 1	Polaris Polaris SP.†	51,22 37,53	26,98 27,50	+ 1,27	+ 12,94	+ 3,074	+ 4,21	The mean between this and the preceding value is adopted.
26. 1 13 27. 1	Polaris SP. Polaris Polaris SP.	32,63 47,69 33,72			- 15,06 + 13,97	- 3,074 + 3,074	+ 4,72	
Oct. 7. 0 12	Polaris SP. Polaris	28,93 43,82	31,02 31,03	+ 0,35	- 15,23	- 3,074	+ 4,96	By a mistake, +4",73 was used instead of this determination. The apparent R.A. are slightly affected by this error.
22. 22 23	β Leonis Polaris SP.	0,16 13,59	8,24 31,01	+ 0,04	+ 9,30	+ 1,549	+ 6,00	
Nov. 15. 21 22	Polaris SP. Arcturus	50,56 6,29	25,57 34,75	+ 0,04	- 6,59	- 1,552	+ 4,25	
21. 10 12	Polaris α Arietis	57,08 54,40	23,00 28,83	+ 0,06	+ 8,45	+ 1,520	+ 5,56	
26. 13 14 14	α Orionis δ Ursæ Min. SP. Sirius	9,84 14,50 41,89	48,82 55,81 20,93		+ 2,33 - 2,27	+ 0,692 - 0,674	+ 3,37 + 3,37	
Dec. 4. 20 5. 8	Polaris SP. Polaris	21,31 40,12	15,91 15,62	+ 0,24	- 19,34	- 3,074	+ 6,29	
19. 7 20. 22	Polaris Polaris SP.	26,53 4,92	6,47 5,54	+ 0,67	+ 20,01	+ 3,074	+ 6,51	
* This observation is omitted in the printed Transits. It was a transit taken at only one wire (Wire I), the noted clock time being 12.38.10,9. Clouds prevented observing the times at the other wires. † Observed at two wires only.								

The azimuth errors in seconds of space, and the days on which the several values are first used, are stated in the space immediately below the columns. The correction in seconds of time applied to each transit is,

$$\frac{1}{15} \times \text{azimuth error} \times \sin \text{Zen. Dist.} \times \text{cosec. N.P.D.},$$

the zenith distance being negative to the north of the zenith, and the north polar distance negative to the north of the pole.

The seconds of transit of each object, corrected for the errors of collimation, level, and azimuth, are arranged in the *eleventh column*. If the three errors be called respectively, a , b , c , and if δ be the north polar distance of the object, and z the zenith distance south, that is, the algebraic excess of δ above the colatitude of the observatory $37^{\circ}.47'.8''$, then the sum of the three corrections is,

$$a \cdot \frac{1}{15 \sin \delta} + b \cdot \frac{\cos z}{15 \sin \delta} + c \cdot \frac{\sin z}{15 \sin \delta}.$$

The computation of this quantity is much facilitated by the use of the subjoined Table of values of the factors of a , b , and c , the argument of the Table being the north polar distance of the object.

N.P.D.	$\frac{1}{15 \sin \delta}$	$\frac{\cos z}{15 \sin \delta}$	$\frac{\sin z}{15 \sin \delta}$	N.P.D.	$\frac{1}{15 \sin \delta}$	$\frac{\cos z}{15 \sin \delta}$	$\frac{\sin z}{15 \sin \delta}$	N.P.D.	$\frac{1}{15 \sin \delta}$	$\frac{\cos z}{15 \sin \delta}$	$\frac{\sin z}{15 \sin \delta}$
0				0				0			
-45	-0,094	-0,012	+0,094	24	+0,165	+0,159	-0,039	75	+0,069	+0,055	+0,042
-44	-0,096	-0,014	+0,096	25	+0,158	+0,154	-0,035	76	+0,069	+0,054	+0,043
-43	-0,098	-0,016	+0,097	26	+0,152	+0,149	-0,031	77	+0,069	+0,053	+0,044
-42	-0,100	-0,018	+0,099	27	+0,146	+0,144	-0,027	78	+0,068	+0,052	+0,044
-41	-0,102	-0,020	+0,100	28	+0,141	+0,140	-0,024	79	+0,068	+0,051	+0,045
-40	-0,104	-0,022	+0,102	29	+0,137	+0,136	-0,021	80	+0,068	+0,050	+0,046
-39	-0,106	-0,024	+0,103	30	+0,133	+0,132	-0,018	81	+0,068	+0,049	+0,047
-38	-0,109	-0,026	+0,105	31	+0,129	+0,128	-0,015	82	+0,068	+0,048	+0,047
-37	-0,111	-0,029	+0,107	32	+0,126	+0,125	-0,012	83	+0,067	+0,048	+0,048
-36	-0,114	-0,031	+0,109	33	+0,122	+0,122	-0,009	84	+0,067	+0,047	+0,048
-35	-0,116	-0,034	+0,111	34	+0,119	+0,119	-0,007	85	+0,067	+0,046	+0,049
-34	-0,119	-0,037	+0,113	35	+0,116	+0,116	-0,005	86	+0,067	+0,045	+0,050
-33	-0,122	-0,040	+0,115	36	+0,114	+0,114	-0,003	87	+0,067	+0,044	+0,051
-32	-0,126	-0,043	+0,118	37	+0,111	+0,111	-0,001	88	+0,067	+0,043	+0,051
-31	-0,129	-0,046	+0,121	38	+0,109	+0,109	+0,001	89	+0,067	+0,042	+0,052
-30	-0,133	-0,050	+0,124	39	+0,106	+0,106	+0,003	90	+0,067	+0,041	+0,053
-29	-0,137	-0,054	+0,127	40	+0,104	+0,104	+0,004	91	+0,067	+0,040	+0,054
-28	-0,141	-0,058	+0,130	41	+0,102	+0,102	+0,006	92	+0,067	+0,039	+0,055
-27	-0,146	-0,062	+0,133	42	+0,100	+0,100	+0,007	93	+0,067	+0,038	+0,055
-26	-0,152	-0,067	+0,137	43	+0,098	+0,098	+0,009	94	+0,067	+0,037	+0,056
-25	-0,158	-0,072	+0,141	44	+0,096	+0,096	+0,010	95	+0,067	+0,036	+0,057
-24	-0,165	-0,077	+0,145	45	+0,094	+0,094	+0,012	96	+0,067	+0,035	+0,058
-23	-0,172	-0,083	+0,149	46	+0,092	+0,092	+0,014	97	+0,067	+0,034	+0,058
-22	-0,179	-0,089	+0,154	47	+0,091	+0,090	+0,015	98	+0,068	+0,034	+0,059
-21	-0,187	-0,096	+0,159	48	+0,090	+0,089	+0,016	99	+0,068	+0,033	+0,059
-20	-0,195	-0,104	+0,165	49	+0,088	+0,087	+0,018	100	+0,068	+0,032	+0,060
-19	-0,205	-0,112	+0,172	50	+0,087	+0,085	+0,019	101	+0,068	+0,031	+0,061
-18	-0,216	-0,121	+0,179	51	+0,085	+0,083	+0,021	102	+0,068	+0,030	+0,062
-17	-0,228	-0,131	+0,187	52	+0,084	+0,082	+0,022	103	+0,069	+0,029	+0,062
-16	-0,242	-0,143	+0,195	53	+0,083	+0,081	+0,023	104	+0,069	+0,028	+0,063
-15	-0,258	-0,156	+0,205	54	+0,082	+0,079	+0,024	105	+0,069	+0,027	+0,064
-14	-0,276	-0,170	+0,217	55	+0,081	+0,078	+0,024	106	+0,069	+0,026	+0,065
-13	-0,297	-0,187	+0,230	56	+0,080	+0,076	+0,025	107	+0,070	+0,025	+0,066
-12	-0,321	-0,207	+0,245	57	+0,079	+0,075	+0,026	108	+0,070	+0,024	+0,066
-11	-0,350	-0,231	+0,263	58	+0,078	+0,073	+0,027	109	+0,071	+0,023	+0,067
-10	-0,384	-0,258	+0,285	59	+0,077	+0,072	+0,028	110	+0,071	+0,022	+0,068
				60	+0,077	+0,071	+0,029	111	+0,072	+0,021	+0,069
10	+0,384	+0,340	-0,179	61	+0,076	+0,070	+0,030	112	+0,072	+0,020	+0,070
11	+0,350	+0,313	-0,157	62	+0,076	+0,069	+0,031	113	+0,073	+0,018	+0,070
12	+0,321	+0,289	-0,139	63	+0,075	+0,068	+0,032	114	+0,073	+0,017	+0,071
13	+0,297	+0,269	-0,124	64	+0,075	+0,067	+0,033	115	+0,074	+0,016	+0,072
14	+0,276	+0,252	-0,111	65	+0,074	+0,066	+0,034	116	+0,075	+0,015	+0,073
15	+0,258	+0,238	-0,099	66	+0,073	+0,065	+0,035	117	+0,075	+0,014	+0,074
16	+0,242	+0,225	-0,089	67	+0,073	+0,063	+0,036	118	+0,076	+0,013	+0,075
17	+0,228	+0,213	-0,081	68	+0,072	+0,062	+0,037	119	+0,076	+0,012	+0,076
18	+0,216	+0,203	-0,073	69	+0,072	+0,061	+0,037	120	+0,077	+0,011	+0,077
19	+0,205	+0,194	-0,066	70	+0,071	+0,060	+0,038	121	+0,078	+0,010	+0,078
20	+0,195	+0,186	-0,059	71	+0,071	+0,059	+0,039	122	+0,078	+0,008	+0,079
21	+0,187	+0,178	-0,053	72	+0,070	+0,058	+0,040	123	+0,079	+0,007	+0,080
22	+0,179	+0,171	-0,048	73	+0,070	+0,057	+0,041	124	+0,080	+0,005	+0,080
23	+0,172	+0,165	-0,043	74	+0,069	+0,056	+0,041	125	+0,081	+0,004	+0,081

In addition to the foregoing general Table, the following applying especially to the stars observed for clock error and for azimuth error, is also used. This Table was calculated for the mean N.P.D. of the stars Jan. 1, 1844.

Star.	$\frac{1}{15 \sin \delta}$	$\frac{\cos z}{15 \sin \delta}$	$\frac{\sin z}{15 \sin \delta}$	Star.	$\frac{1}{15 \sin \delta}$	$\frac{\cos z}{15 \sin \delta}$	$\frac{\sin z}{15 \sin \delta}$
α Andromedæ	+ 0,076	+ 0,069	+ 0,031	Spica	+ 0,068	+ 0,031	+ 0,060
β Ceti	+ 0,070	+ 0,023	+ 0,067	Arcturus	+ 0,071	+ 0,060	+ 0,038
Polaris	+ 2,510	+ 2,024	- 1,484	ϵ Bootis	+ 0,075	+ 0,069	+ 0,031
α Arietis	+ 0,072	+ 0,063	+ 0,036	α^2 Libræ	+ 0,069	+ 0,026	+ 0,064
α Ceti	+ 0,067	+ 0,044	+ 0,050	α Coronæ Borealis	+ 0,075	+ 0,068	+ 0,032
Aldebaran	+ 0,069	+ 0,056	+ 0,041	α Serpentis	+ 0,067	+ 0,047	+ 0,048
Rigel	+ 0,067	+ 0,033	+ 0,059	δ Ophiuchi	+ 0,067	+ 0,038	+ 0,055
β Tauri	+ 0,076	+ 0,069	+ 0,031	Antares	+ 0,074	+ 0,015	+ 0,073
α Orionis	+ 0,067	+ 0,048	+ 0,047	α Herculis	+ 0,069	+ 0,055	+ 0,042
δ Ursæ Minoris SP.	- 1,122	- 0,844	+ 0,739	α Ophiuchi	+ 0,068	+ 0,053	+ 0,044
51 (Hev.) Cephei	+ 1,395	+ 1,142	- 0,801	μ^1 Sagittarii	+ 0,071	+ 0,021	+ 0,068
Sirius	+ 0,070	+ 0,025	+ 0,065	δ Ursæ Minoris	+ 1,122	+ 0,926	- 0,634
Castor	+ 0,079	+ 0,074	+ 0,027	51 (Hev.) Cephei SP.	- 1,395	- 1,060	+ 0,906
Procyon	+ 0,067	+ 0,046	+ 0,049	β Lyræ	+ 0,080	+ 0,075	+ 0,026
Pollux	+ 0,076	+ 0,069	+ 0,031	ζ Aquilæ	+ 0,069	+ 0,054	+ 0,043
ϵ Hydræ	+ 0,067	+ 0,047	+ 0,048	γ Aquilæ	+ 0,068	+ 0,050	+ 0,045
α Hydræ	+ 0,067	+ 0,033	+ 0,058	α Aquilæ	+ 0,067	+ 0,049	+ 0,047
Regulus	+ 0,068	+ 0,053	+ 0,043	β Aquilæ	+ 0,067	+ 0,046	+ 0,048
δ Leonis	+ 0,072	+ 0,061	+ 0,037	α^2 Capricorni	+ 0,068	+ 0,029	+ 0,062
β Leonis	+ 0,069	+ 0,055	+ 0,041	β Aquarii	+ 0,067	+ 0,035	+ 0,057
β Corvi	+ 0,072	+ 0,019	+ 0,070	α Aquarii	+ 0,067	+ 0,040	+ 0,053
Polaris SP.	- 2,510	- 1,942	+ 1,590	α Pegasi	+ 0,069	+ 0,054	+ 0,042

Clock Error.—The errors of the Clock are the excesses of the assumed apparent right ascensions of the stars which have been selected for the determination of true sidereal time, above the clock times of meridian transit. The Assumed Mean Right Ascensions, Jan. 1, 1844, of these fundamental stars are given in the subjoined Table, in which Polaris and δ Ursæ Minoris are also included, because their apparent right ascensions are employed for finding the azimuth error.

Star.	Assumed Mean R.A. Jan. 1, 1844.	Excess above Naut. Alm. 1844.	Star.	Assumed Mean R.A. Jan. 1, 1844.	Excess above Naut. Alm. 1844.
α Andromedæ ..	<i>h. m. s.</i> 0. 0. 20,13	+ 0,04	Arcturus	<i>h. m. s.</i> 14. 8. 32,89	0,00
β Ceti	0. 35. 45,33	+ 0,02	ϵ Bootis	14. 38. 10,48	0,00
Polaris	1. 3. 18,25	+ 0,28	α^2 Libræ	14. 42. 15,54	0,00
α Arietis	1. 58. 23,56	+ 0,08	α Coronæ Bor.	15. 28. 5,11	+ 0,08
α Ceti	2. 54. 7,90	+ 0,06	α Serpentis.	15. 36. 35,33	+ 0,12
Aldebaran	4. 26. 58,54	- 0,04	δ Ophiuchi.	16. 6. 10,55	+ 0,01
Rigel	5. 7. 2,61	+ 0,01	Antares	16. 19. 51,15	+ 0,07
β Tauri	5. 16. 26,10	- 0,04	α Herculis	17. 7. 32,24	+ 0,04
α Orionis	5. 46. 43,66	- 0,03	α Ophiuchi.	17. 27. 41,76	+ 0,08
Sirius	6. 38. 16,56	+ 0,03	μ^1 Sagittarii	18. 4. 26,10	+ 0,02
Castor	7. 24. 38,25	- 0,15	δ Ursæ Minoris ..	18. 22. 38,18	- 1,16
Procyon	7. 31. 7,99	+ 0,06	β Lyræ	18. 44. 19,29	+ 0,02
Pollux	7. 35. 45,70	- 0,08	ζ Aquilæ	18. 58. 14,47	+ 0,02
ϵ Hydræ	8. 38. 30,74	0,00	γ Aquilæ	19. 38. 50,59	+ 0,02
α Hydræ	9. 19. 55,26	- 0,01	α Aquilæ	19. 43. 10,37	+ 0,08
Regulus	10. 0. 3,57	- 0,08	β Aquilæ	19. 47. 39,06	+ 0,08
δ Leonis	11. 5. 48,21	+ 0,02	α^2 Capricorni ...	20. 9. 23,71	+ 0,06
β Leonis	11. 41. 5,95	+ 0,03	β Aquarii	21. 23. 20,61	+ 0,06
β Corvi	12. 26. 12,23	+ 0,02	α Aquarii	21. 57. 46,20	0,00
Spica	13. 16. 58,96	+ 0,05	α Pegasi	22. 56. 59,68	+ 0,04

The assumed mean Right Ascensions were obtained by adding the annual variations to the mean Right Ascensions, Jan. 1, 1843 concluded from the observations of 1843, whenever the number of observations from which the R.A. of any star was concluded, was not less than twenty. In other cases if A be the assumed R.A. of 1843, and if A' be the R.A. resulting from a number (n) of observations in that year less than 20,

the assumed R.A. of 1844 is $A + (A' - A) \frac{n}{20}$ increased by the annual variation. It having been found desirable to employ a greater number of fundamental stars, the following have been added to the list of those used in former years: β Ceti, Sirius, ϵ Hydræ, δ Leonis, β Corvi, μ^1 Sagittarii, β Lyræ, ζ Aquilæ, and γ Aquilæ. The assumed mean R.A. Jan. 1, 1844 of these stars, with the exception of Sirius, ϵ Hydræ, and ζ Aquilæ, are the R.A. of the Nautical Almanac corrected by $+0^s.02$, the mean excess of the R.A. of all the fundamental stars above the R.A. of the Nautical Almanac, as given by the observations of 1843, being $0^s.020$. The excepted stars were observed a few times in 1843, and the excesses of their assumed R.A. above the R.A. of the Nautical Almanac were adopted after giving weight to the results of the observations of that year.

To form the assumed apparent R.A. used for the determination of the error of the clock, the excesses above the Nautical Almanac in the foregoing Table, are added to the apparent R.A. of that work. It will be seen that the corrections which are thus adopted for aberration, precession, and nutation, are the same as those of the Nautical Almanac, which assume the constant of aberration to be $20''.36$, and that of lunar nutation to be $9''.25$. The assumed apparent R.A. of Polaris and δ Ursæ Minoris take account of the additional corrections, depending on the Moon's longitude, which are given in pages 478 and 479 of the Nautical Almanac for 1844.

The clock errors in the *twelfth column* are the excesses of the assumed apparent right ascensions of the fundamental stars above the times of meridian transit. It has been thought unnecessary to place, as in former volumes, the seconds of the assumed R.A. in a separate column, as they may be immediately inferred by adding the numbers of the twelfth column to the numbers of the eleventh; and in all cases in which the assumed R.A. are used for the determination of azimuth error, the seconds are inserted in the Table of azimuth errors contained in pp. xv—xvii of this Introduction. The times of putting forward the minute-hand of the clock are stated in the space immediately below the columns.

For the purpose of calculating the correction to be applied to each observation for error of the clock, the observations are divided into groups severally containing stars proper for giving clock errors. These groups, the limits of which are marked by *bars* across the column of clock errors, are separated by intervals during which no observations have been taken, and which, as often as possible, belong to consecutive nights. The mean of the clock errors in each group is considered to apply to the mean of the times of transit of the stars which furnish them. The comparison of this mean error with errors similarly derived from the next preceding and following groups, give a preceding and a following rate; whence a rate is inferred, which is assumed to hold uniformly throughout the middle group. No definite rule can be given for inferring the adopted rate: attention is paid to the probable relative accuracy of the rates on which it depends, and also to the proportion of the intervals separating the preceding and following mean clock errors from the intermediate one.

As it appeared from observations, recorded in p. xii of the Introduction to the Volume for 1843 that the difference of personal equation between myself and Mr Glaisher is very small, no account is taken of it in determining clock errors and rates from a combination of our observations. The transits taken by Mr Berry from Oct. 13 to Oct. 20 appear to give clock errors consistent with the preceding and following clock errors by Mr Glaisher's observations; and an observation of α Pegasi on Nov. 20 in which the transits at four wires were taken by the former observer and those at the remaining three by the latter, gives a clock error agreeing well enough with clock errors by Mr Glaisher's observations on the same day. On these accounts the few transits taken by Mr Berry are treated as if no personal equation existed between the two observers. The transits of Mr Glaisher and Mr Morgan from Nov. 23 to Dec. 7, have been similarly treated; for although there were indications of difference of personal equation, yet as it appeared to be a variable quantity, owing probably to the little experience Mr Morgan had had in taking transits, it was found impracticable to allow for it.

The adopted rate, determined in the manner above stated, is placed in the *thirteenth* column, with *bars* across to mark the limits within which it is used. These limits generally coincide with the limits of the groups of observations.

The Apparent Right Ascensions from observation, given in the *fourteenth* column, are deduced as follows from the clock times of meridian transit. The adopted rate is employed, first, in calculating from the mean clock error of the group to which it applies, the correction for clock error at each 0^h of sidereal time which occurs within the limits of the group, and then in finding the additional correction for the interval between each transit and the next preceding 0^h. The result of adding the sum of these corrections to the time of meridian transit is the apparent R.A. concluded from the observation. The apparent R.A. of the fundamental stars, if fewer than three are contained in the same group, and the apparent R.A. of Polaris and δ Ursæ Minoris, if the azimuth error is not determined by two or more transits of one of these stars, are not inserted in the column of apparent R.A.

The *fifteenth* column contains the initial of the observer's name. The letter C indicates the observations made by myself, and the letters G, B, and M, indicate those made respectively by Mr Glaisher, Mr Berry, and Mr Morgan.

The notes in the space at the bottom of the page consist of incidental and explanatory remarks and such as may serve to identify the stars. To give an opportunity of judging of the weight due to individual observations, it was thought right to omit the mention of no circumstance which seemed likely in any way to affect the result of an observation.

II. *Mean Right Ascensions of the Stars as deduced from the separate observations, with a Catalogue of their concluded mean Right Ascensions.* Pages 40—52.

The columns in pages 40—49 contain the names of the stars arranged in order of right ascension, the days on which each star was observed, the corrections (for aberration, precession, and nutation) to be added algebraically to the apparent Right Ascensions extracted from the columns of 'apparent R.A. from observation,' in pages 1—38 to obtain the mean Right Ascensions, and, lastly, the resulting mean Right Ascensions Jan. 1, 1844. The corrections are calculated as follows.

For stars whose apparent Right Ascensions are given in the Nautical Almanac, the corrections are obtained by subtracting the apparent from the mean Right Ascensions of that work, after applying to the former in the instances of Polaris and δ Ursæ Minoris, the small corrections in Naut. Alm. pp. 478 and 479. For a star in the Catalogue of the Royal Astronomical Society, and not included in the list of the Nautical Almanac, the correction (δa) is calculated by the formula,

$$-\delta a = Aa + Bb + Cc + Dd,$$

$\log A$, $\log B$, $\log C$, and $\log D$ being taken without alteration from the Nautical Almanac, and $\log a$, $\log b$, $\log c$, $\log d$, from that Catalogue. The formula employed for all other stars is

$$\begin{aligned} -\delta a = & \frac{A}{15} \cos \mathcal{R} \operatorname{cosec} \text{N.P.D.} + \frac{B}{15} \sin \mathcal{R} \operatorname{cosec} \text{N.P.D.} + C \times [0,4869] \\ & + \frac{C}{15} \times [1,3020] \times \sin \mathcal{R} \cotan \text{N.P.D.} + \frac{D}{15} \cos \mathcal{R} \cotan \text{N.P.D.}, \end{aligned}$$

in which the expressions for a , b , c , d , given in p. xvii of the Preface to the Royal Astronomical Society's Catalogue, are adopted.

The *Catalogue* in pages 50—52 contains the mean R.A. Jan. 1, 1844, of each star concluded from all the preceding values of its mean R.A. The values included in brackets are not taken into account in deducing the means. The *Annual Variations* are either adopted from

the Nautical Almanac, or are computed by the following formula, the constants of which are derived from the data in Bessel's *Tabulæ Regiomontanæ*, p. x.

$$\text{Annual Variation in R.A.} = 3^s,07046 + 1^s,33703 \times \cotan. \text{N.P.D.} \times \sin \text{R.A.}$$

Proper motions are not taken into account unless they are included in the Annual Variations adopted from the Nautical Almanac.

For facilitating the identifying of the stars, columns of approximate N.P.D. are added, and of anonymous stars the magnitudes are also mentioned. When the star is double, the component to which the R.A. applies is indicated by the letters *np*, *nf*, *sp*, *sf*, in their usual significations, the angles of position of the stars being known from previous observations with the Northumberland Telescope. It is presumed, if the observer has not noted which star was taken, and the components are far enough apart to be seen distinctly in the Transit Telescope, that the selection has been made according to the rule in p. i. Also, if the star cannot be distinguished as double in the Transit Telescope, and one of the components is known to be considerably brighter than the other from observations with the Northumberland Telescope, the transit observation is considered to apply to the brighter. In several instances of very close components of nearly equal magnitude, no letters are affixed, and the R.A. is supposed to apply to the middle point between them. When the star is triple or multiple, the component to which the R.A. applies is mentioned in a note at the bottom of the page.

III. *Apparent North Polar Distances observed with the Mural Circle.*

The particulars of observations with the Mural Circle, and the data for calculating the apparent North Polar Distances, are contained in pages 54—99. The following is the explanation of the contents of the separate columns.

The *first column* has the day of observation, commencing always with the Sun's passage.

The *second column* contains the name of the object observed. The letter *R* following the name, denotes that the object was observed by reflection in a trough of mercury. The stars are named according to the rule adopted with respect to the Transit observations. Anonymous stars are designated by their approximate mean right ascensions.

The order of the six microscopes, beginning with *A*, which is at the northern extremity of the horizontal diameter of the circle, and proceeding over the highest part of the limb, is *ACEBDF*, so that *A* and *B*, *C* and *D*, *E* and *F*, are severally at the ends of a diameter. The order of the graduation is from South to North through the highest point of the circle. All micrometer readings increase as the micrometer wires move *towards* the graduated micrometer-heads. The microscopes have their micrometer-heads all directed the same way relatively to the graduation of the circle: that of *A* is *downwards*. When the Telescope is horizontal and its object glass looks southward, the micrometer-head of the eye-piece micrometer is also downwards.

The *six succeeding columns* contain the readings of the six microscopes. The divisions of the graduation of the circle are 5' apart. The minutes, which are set down in the first of these columns, are indicated by the number of indents of the comb of the microscope in the interval between the division bisected by the micrometer wire and the hole of the comb; and the seconds and fraction of a second are taken from the micrometer-heads. The bisected division is that next to the hole, on the *same* side, as seen in an inverting microscope, as the micrometer-head, excepting in some instances mentioned hereafter.

The microscope readings taken in the manner just stated, are affected with an error of *Runs*, unless the micrometer-wire is carried by five turns of the micrometer exactly from the image of one division to that of the next, which very rarely happens to be

the case. The corrections applied on this account, are obtained in the following manner. The circle being clamped in such a position that a division is near the zero of the microscope, this division and the adjacent one towards the micrometer-head, are bisected. The excess of the micrometer reading, for the former, which is called the *negative* division, above the micrometer reading for the other, which is called the *positive* division, is the quantity to be added to a microscope reading of 5' to correct for the error in question. For a less reading the correction is proportionally less. Instead of correcting for each microscope reading separately, it is sufficiently accurate and more expeditious, to add the excesses of the six microscopes together, to take a part of the sum bearing the same ratio to the whole as the approximate mean microscope reading to 5', and then adding up this part with the six microscope readings, to divide the sum by 6 to obtain the corrected mean reading. The sum of the excesses is the 'Correction for Runs' inserted in the space below the columns, where also the days of commencing a new value are stated.

It sometimes happens that a division falls so near the zero of the microscope that it is uncertain whether it be on the negative or positive side. In such a case it is generally bisected, and when found to be on the negative side, the minutes of the microscope readings are put down for the sake of uniformity as if the division on the positive side had been bisected, but no correction, or a small negative correction, is applied for Runs. When this circumstance occurs it is mentioned in the notes.

The following Table exhibits the results of the observations made in 1844 for the Error of Runs of the six microscopes. The temperature in degrees of Fahrenheit, whenever it was noted, is included, because the changes in the amount of Runs appear to depend in great measure on changes of Temperature.

Day of Observation of Runs 1844.	Excess of micrometer-reading for <i>negative</i> division above micrometer-reading for <i>positive</i> division, for each microscope.						Sum of Excesses.	Temperature.		Day of Observation of Runs 1844.	Excess of micrometer-reading for <i>negative</i> division above micrometer-reading for <i>positive</i> division, for each microscope.						Sum of Excesses.	Temperature.	
	A	B	C	D	E	F					A	B	C	D	E	F			
Jan. 1. ^a 3	+1,1	+0,9	+1,8	+1,3	-0,1	-0,8	+4,2	41		July 10. ^a 22	-0,4	-1,0	-0,6	+1,0	-0,1	-1,9	-3,0	64	
6. 23	+0,2	+0,8	-1,0	-0,2	0,0	-1,8	-2,0	47		15. 3	-0,8	-0,1	-1,2	-0,6	-0,1	-1,4	-4,2	68	
15. 0	+0,4	+0,8	-0,5	+2,6	+0,9	-0,9	+3,3	35		21. 23	+0,2	-0,6	-1,1	+1,0	+0,5	-0,9	-0,9	69	
24. 5	+0,5	+1,4	-0,2	+1,6	-0,8	-1,0	+1,5	40		29. 4	-0,3	-0,3	-0,9	+0,8	+0,4	-2,4	-2,7	67	
Feb. 1. 5	+0,6	+1,3	+0,2	+1,3	+1,6	-0,7	+4,3	35		31. 4	-0,4	0,0	-1,3	-0,1	+0,3	-1,9	-3,4	63	
4. 23	+1,6	+0,7	0,0	+0,9	+1,2	-0,5	+3,9	33		Aug. 4. 22	-0,3	+0,1	-1,7	+0,9	+0,6	-1,2	-1,6	68	
11. 23	+0,7	-0,9	+0,2	+2,9	+1,7	-0,8	+3,8	33		11. 23	0,0	-0,4	-0,4	-0,5	-0,1	-1,8	-3,2	70	
19. 22	+0,6	0,0	+0,7	+2,0	+0,8	-0,5	+3,6	35		18. 23	+0,2	+0,8	-0,4	0,0	-0,4	-1,8	-1,6	61	
27. 22	+0,2	+0,1	-1,0	+1,2	+1,1	-1,3	+0,3	40		25. 22	-0,2	-0,6	-0,1	-0,2	-0,2	-1,2	-2,5	60	
Mar. 4. 0	+0,5	+1,0	-0,9	+1,8	+0,8	-0,9	+2,3	42		Sept. 1. 22	-0,4	-0,4	-0,6	+0,5	+1,3	-0,9	-0,5	62	
10. 22	-0,2	-0,4	-1,0	+0,8	0,0	-1,9	-2,7			9. 23	-0,3	+0,8	-0,6	+0,9	-0,3	-1,5	-1,0	61	
17. 22	+0,3	+1,6	-1,0	+1,0	+1,0	-0,9	+2,0	38		15. 22	-0,5	+0,1	-1,1	+0,6	0,0	-1,5	-2,4	64	
25. 23	-0,2	-0,7	-1,0	+0,7	+0,7	-1,0	-1,5			22. 22	0,0	+0,2	-0,7	+0,6	+0,3	-0,7	-0,3	56	
31. 23	+1,3	+0,9	-0,9	+0,7	+0,2	-0,9	+1,3	49		29. 22	+0,7	+0,9	-0,4	+0,1	+0,6	-0,5	+1,4	52	
Apr. 7. 22	-0,2	+1,1	-0,2	+0,7	+1,2	-1,3	+1,3	48		Oct. 6. 22	-1,0	+0,6	-1,1	+0,7	+0,4	-1,3	-1,7	52	
14. 23	-2,0	-0,3	-0,9	+1,0	-1,1	-1,0	-4,3	56		13. 22	+0,8	+0,4	-1,1	+0,4	+0,3	-0,8	0,0	55	
21. 22	+0,5	+0,1	+0,3	+1,0	-0,1	-1,8	0,0	56		20. 22	+0,1	+1,1	-0,4	+0,8	+0,3	-0,8	+1,1		
27. 1	-0,9	-1,0	+0,1	+1,7	-0,1	-1,6	-1,8	57		27. 22	+1,0	+0,8	-0,9	+1,1	+1,1	-1,1	+2,0	43	
May 6. 0	-0,5	-0,2	-0,4	+1,4	+1,1	-1,5	-0,1	60		Nov. 11. 0	+0,4	0,0	+0,7	+1,6	+0,9	-0,8	+2,8	45	
12. 22	+0,6	-0,4	-0,8	+0,8	+0,1	-1,8	-1,5	61		17. 22	+0,4	+0,8	-1,3	+1,0	0,0	-1,8	-0,9	49	
19. 22	+0,6	0,0	0,0	+1,1	+1,5	-1,7	+1,5	54		24. 22	-0,6	+0,4	0,0	+0,5	-0,1	-0,3	-0,1	40	
26. 22	+1,4	+0,1	+0,8	-2,0	+1,0	-0,2	+1,1	48		Dec. 2. 22	+1,0	+0,9	+0,1	+2,2	+0,5	-1,0	+3,7	37	
28. 22	+0,2	+0,9	-0,5	+1,1	-0,1	-2,5	-0,9	51		8. 22	+0,6	+0,6	+0,1	+1,4	+0,8	0,0	+3,5		
June 2. 23	-0,1	+0,2	-1,3	+0,7	+0,4	-0,3	-0,4	54		16. 22	+0,2	+0,1	-0,9	-1,0	+0,9	+0,5	-0,2		
9. 22	+0,6	-0,2	-1,0	+1,1	-0,2	-1,6	-1,3	61		22. 22	+0,7	+0,7	0,0	+2,4	+1,6	-0,4	+5,0		
16. 22	+0,2	-1,7	-1,1	+0,4	0,0	-1,4	-3,6	63		29. 22	+1,2	+1,2	-0,8	+0,8	-0,2	-0,3	+1,9	37	
24. 22	0,0	+0,2	-0,8	+0,9	-0,3	-1,5	-1,5	63											
30. 23	+0,2	+0,5	-0,9	+1,0	+0,6	-0,8	+0,6	61											

The Runs taken on July 31 are only used in determining the value of the micrometer revolution.

The readings of the micrometer, when the objects named in the second column are bisected by the micrometer wire, are put in the *ninth column*.

The amount of correction for reducing to the fixed wire an observation taken with the micrometer wire, is the difference between the recorded micrometer reading and the reading for coincidence of the micrometer wire with the fixed wire, converted into arc by multiplying by 20",838, which is the arc corresponding to one revolution of the micrometer-head. The micrometer readings increase as the micrometer wire moves towards the micrometer-head, which is also the direction in which the graduation of the circle proceeds. Hence, as the microscope readings are increased by turning the Telescope so as to increase the micrometer reading for bisection of a given object, it follows that the correction is *positive* or *negative*, according as the micrometer reading is *less* or *greater* than the reading for coincidence with the fixed wire.

As the micrometer wire is not exactly parallel to the fixed wire, the coincidence readings at the five vertical wires are observed from time to time, as well as, more frequently, the coincidence reading at the middle wire, and different values are used according to the position of the object in the field at the time of its bisection by the micrometer wire. When the coincidence reading has been taken at the middle wire only, the readings at the other wires are inferred by making the differences the same as in the preceding or following coincidence readings taken at all the wires. The adopted values at the five wires, and the days on which they are first used, are stated in the space immediately below the columns. When an observation is taken between two wires, the coincidence reading is obtained by interpolation; when taken beyond the wires, a proportionate allowance for change of coincidence reading is made according to the amount of change between the first and fifth wires.

The following is a collection of the coincidence readings observed in 1844, with the times of recording them, and the Temperature of the Circle Room in degrees of Fahrenheit, as often as it was noted. Each of these readings is the mean of twelve, six of which were taken after directing the Telescope to 45° North of the Zenith, and the other six after directing it to 45° South of Zenith.

Coincidence readings at the five wires.

Time of Observation.	Coincidence reading at wire					Temperature.	Time of Observation.	Coincidence reading at wire					Temperature.
	I	II	III	IV	V			I	II	III	IV	V	
Jan. 6. 23	10,193	10,201	10,215	10,228	10,238	47	June 25. 22	10,203	10,211	10,218	10,228	10,240	57
Feb. 2. 22	10,218	10,229	10,245	10,257	10,267	33	29. 4	10,194	10,206	10,210	10,222	10,230	67
27. 22	10,217	10,225	10,239	10,252	10,260	40	Aug. 25. 22	10,198	10,211	10,218	10,227	10,235	60
Mar. 31. 23	10,210	10,220	10,234	10,244	10,254	49	Sept. 22. 22	10,205	10,217	10,225	10,231	10,241	56
Apr. 28. 23	10,203	10,212	10,223	10,239	10,246	61	Oct. 20. 22	10,210	10,222	10,231	10,239	10,249	
May 26. 22	10,208	10,216	10,229	10,240	10,251	48	Nov. 24. 22	10,247	10,261	10,265	10,268	10,270	40
28. 22	10,205	10,215	10,225	10,236	10,248	50	Dec. 23. 23	10,234	10,244		10,262	10,263	

Coincidence readings at the middle wire.

Time of Observation.	Coincid. Reading.	Temp.	Time of Observation.	Coincid. Reading.	Temp.	Time of Observation.	Coincid. Reading.	Temp.	Time of Observation.	Coincid. Reading.	Temp.
Jan. 1. 3 ^A	10,156	41 ⁰	Apr. 14. 23 ^A	10,225	56 ⁰	July 10. 22 ^A	10,220	64 ⁰	Oct. 6. 22 ^A	10,230	52 ⁰
18. 23	10,243		21. 22	10,222	56	15. 3	10,212	68	13. 22	10,228	55
			27. 1	10,222	57	21. 23	10,216	69	27. 22	10,244	43
Feb. 4. 23	10,251	33									
11. 23	10,247	33	May 6. 0	10,218	60	Aug. 4. 22	10,218	68	Nov. 11. 0	10,248	45
19. 22	10,245	35	12. 22	10,220	61	11. 23	10,215	70	17. 22	10,249	49
			19. 22	10,228	54	18. 23	10,219	61			
Mar. 4. 0	10,244	42							Dec. 2. 22	10,254	37
10. 22	10,231		June 2. 23	10,229	54	Sept. 1. 22	10,228	62	8. 22	10,259	
17. 22	10,237	39	9. 22	10,220	61	9. 23	10,232	61	16. 22	10,261	
25. 23	10,232		16. 22	10,219	63	15. 22	10,227	64	22. 22	10,255	
			30. 23	10,219	61	29. 22	10,231	52	29. 22	10,252	37
Apr. 7. 22	10,230	48									

On Jan. 4, having found the middle wire broken, I put in a new one, to do which it was necessary to replace the fixed wire also by a new one. This accounts for the change of coincidence reading between Jan. 1 and Jan. 6. It seems by the above Tables that the coincidence reading decreases with the increase of Temperature: also that there is a gradual increase in the course of the year.

July 31. 3^h. I observed as follows for determining the value of one revolution of the Telescope micrometer. The micrometer wire was made to bisect a small rectangular aperture at the top of Grantchester tower, which was distinct and pretty steady.

Micrometer reading.	Pointer reading.	Microscope A	B	C	D	E	F	Correction for Runs.	Concluded Circle reading.	Difference.
- 15	111. 40	3. 8,4	2,6	1,9	1,1	1,1	0,9	- 2,1	111. 43. 2,32	" "
+ 15	111. 50	3. 36,1	28,8	28,3	26,6	28,0	27,6	- 2,4	111. 53. 28,83	10. 26,51
- 15	111. 40	3. 11,0	4,5	4,3	3,3	3,6	2,8	- 2,1	111. 43. 4,57	10. 24,26
+ 15	111. 50	3. 40,8	33,4	33,8	30,6	32,9	33,0	- 2,4	111. 53. 33,68	(10. 29,11)
- 15	111. 40	3. 15,9	9,9	9,8	7,8	7,5	8,0	- 2,2	111. 43. 9,45	10. 24,23
+ 15	111. 50	3. 41,7	34,9	35,2	32,3	33,7	33,8	- 2,4	111. 53. 34,87	10. 25,42
- 15	111. 40	3. 15,9	9,9	9,5	7,7	7,8	8,8	- 2,2	111. 43. 9,57	10. 25,30

The temperature was about 60°. The correction for Runs, the amount of which for 5' was found immediately after the above measures to be -3",4, is applied on the principle which has been already explained. The third of the above differences does not accord with the rest, owing either to a sudden change of terrestrial refraction, or possibly to the circumstance that the microscopes were read in the three first measures by myself and in the remaining four by Mr Glaisher, the mark being in each instance bisected by myself. It was thought right not to take this difference into account. The mean of the other five gives 20",838 for the value of the micrometer revolution, which is adopted.

When the observation is not made at or very near the middle wire, the distance of the place of bisection from the middle wire is expressed in the *tenth column* in whole intervals and parts of an interval between consecutive wires, the negative or positive sign being affixed according as the bisection was made *before* or *after* passing the middle wire. The times by Molyneux of the bisection of Polaris and δ Ursæ Minoris, whenever these stars are not observed very near the true meridian, and the difference between Molyneux and Hardy, the transit clock, are stated in the notes at the bottom of the page.

The corrections required to reduce the observation to what it would have been if taken at the middle wire, depend, for the fixed stars, only on the curvature of their diurnal paths, but for the moving bodies, both on curvature of path, and on change of N.P.D. These corrections are calculated as follows.

The correction for curvature of path is obtained for Polaris and δ Ursæ Minoris by converting the time by Molyneux into time by Hardy, and thence inferring the true sidereal time from the error of Hardy given by the transit observations. The correction is then immediately deduced from the difference of this time and the time of meridian passage given in the Nautical Almanac, by means of tables especially calculated for these two stars. For other stars, the correction is derived from a general Table calculated by a known formula, according to which, the correction for a given distance from the middle wire varies as the tangent of declination, and for a given declination, varies as the square of the distance. When the declination is 45° , the correction for one interval from the middle wire, which is traversed by an equatoreal star in $16^s.6$, is $0''.1503$. Since in looking directly at an object between the pole and the equator, the Telescope is turned by reason of the curvature of path too far in the direction in which the graduation proceeds, the microscope readings are too small, and the correction is consequently positive. The contrary is the case below the equator and below the pole. In reflexion observations, the error of position of the Telescope is in the opposite direction, and the sign of the correction is always contrary to what it is in observing directly the same objects.

The correction for change of N.P.D. is calculated in the case of the Sun and Planets, by inferring the change in the interval between the time of observation and the passage across the middle wire, from the horary variation given in the Nautical Almanac. The computation is facilitated by the use of a Table of double entry, calculated for one interval from the middle wire, the arguments being the horary variation and the declination.

In observations of the Moon, an exact value of the time of passing from one wire to the next is requisite, on account of the rapid change of her N.P.D. The value employed is $16^s.6$, multiplied by the factor used for correcting to the mean of all the wires in imperfect transit observations of the Moon, the expression for which is given in p. ii. The required correction is then inferred from the variation of the Moon's N.P.D. in 10^m , given in the Nautical Almanac.

The sign of the correction for change of N.P.D. is determined by considering that when the N.P.D. of the moving body is increasing, the Telescope is directed for bisecting it too far in the direction of the circle's graduation before it passes the middle wire, and after passing, too far in the contrary direction. The microscope readings require a *plus* correction in the former case, and a *minus* correction in the other. If the N.P.D. is decreasing, the signs of the corrections are the contrary.

As a separate column is not devoted to the insertion of the sum of the corrections for curvature of path and for variation of N.P.D. in this volume, as in those of former years, it has been thought desirable to introduce here the three Tables above mentioned, for the purpose of facilitating the calculation of these corrections in case it were required to verify the apparent N.P.D. deduced from the observations.

The subjoined table of corrections for curvature of path in circle observations of Polaris and δ Ursæ Minoris was deduced from the formula, $\text{Correction} = [5,31445] \sin 2 \Delta \sin^2 \frac{t}{2}$, Δ being the star's declination, and t the interval of the observation from meridian transit. The declination of Polaris being $88^\circ.29' + n''$, and that of δ Ursæ Minoris being $86^\circ.35' + n''$, the formulæ of calculation for the respective stars are,

$$\text{Correction for Polaris} = [4,03802] \sin^2 \frac{t}{2} - [0,30042] \sin^2 \frac{t}{2} \times n.$$

$$\text{Correction for } \delta \text{ Ursæ Minoris} = [4,38991] \sin^2 \frac{t}{2} - [0,29793] \sin^2 \frac{t}{2} \times n.$$

Corrections for curvature of path of Polaris and δ Ursæ Minoris.

Interval from Meridian Transit.	Correction for Polaris Decl. = $88^{\circ}.29' + n''$.	Differ ^s .	Interval from Meridian Transit.	Correction for Polaris Decl. = $88^{\circ}.29' + n''$.	Differ ^s .	Interval from Meridian Transit.	Correction for δ Ursæ Minoris Decl. = $86^{\circ}.35' + n''$.	Differ ^s .
m. s.	"		m. s.	"		m. s.	"	
0.20	0,01	1	11.40	7,07 - 0,0013 n	41	0.20	0,01	4
0.40	0,02	3	12. 0	7,48 - 0,0014 n	42	0.40	0,05	7
1. 0	0,05	4	12.20	7,90 - 0,0014 n	43	1. 0	0,12	9
1.20	0,09	5	12.40	8,33 - 0,0015 n	45	1.20	0,21	11
1.40	0,14	7	13. 0	8,78 - 0,0016 n	45	1.40	0,32	15
2. 0	0,21	7	13.20	9,23 - 0,0017 n	47	2. 0	0,47	17
2.20	0,28 - 0,0001 n	9	13.40	9,70 - 0,0018 n	48	2.20	0,64 - 0,0001 n	19
2.40	0,37 - 0,0001 n	10	14. 0	10,18 - 0,0019 n	49	2.40	0,83 - 0,0001 n	22
3. 0	0,47 - 0,0001 n	11	14.20	10,67 - 0,0020 n	50	3. 0	1,05 - 0,0001 n	25
3.20	0,58 - 0,0001 n	12	14.40	11,17 - 0,0020 n	51	3.20	1,30 - 0,0001 n	27
3.40	0,70 - 0,0001 n	13	15. 0	11,68 - 0,0021 n	53	3.40	1,57 - 0,0001 n	30
4. 0	0,83 - 0,0002 n	15	15.20	12,21 - 0,0022 n	54	4. 0	1,87 - 0,0002 n	32
4.20	0,98 - 0,0002 n	15	15.40	12,75 - 0,0023 n	54	4.20	2,19 - 0,0002 n	35
4.40	1,13 - 0,0002 n	17	16. 0	13,29 - 0,0024 n	56	4.40	2,54 - 0,0002 n	38
5. 0	1,30 - 0,0002 n	18	16.20	13,85 - 0,0025 n	57	5. 0	2,92 - 0,0002 n	40
5.20	1,48 - 0,0003 n	19	16.40	14,42 - 0,0026 n	59	5.20	3,32 - 0,0003 n	43
5.40	1,67 - 0,0003 n	20	17. 0	15,01 - 0,0027 n	59	5.40	3,75 - 0,0003 n	46
6. 0	1,87 - 0,0003 n	21	17.20	15,60 - 0,0029 n	61	6. 0	4,21 - 0,0003 n	48
6.20	2,08 - 0,0004 n	23	17.40	16,21 - 0,0030 n	61	6.20	4,69 - 0,0004 n	50
6.40	2,31 - 0,0004 n	24	18. 0	16,82 - 0,0031 n	63	6.40	5,19 - 0,0004 n	53
7. 0	2,55 - 0,0005 n	24	18.20	17,45 - 0,0032 n	64	7. 0	5,72 - 0,0005 n	56
7.20	2,79 - 0,0005 n	26	18.40	18,09 - 0,0033 n	65	7.20	6,28 - 0,0005 n	59
7.40	3,05 - 0,0006 n	27	19. 0	18,74 - 0,0034 n	67	7.40	6,87 - 0,0006 n	61
8. 0	3,32 - 0,0006 n	29	19.20	19,41 - 0,0036 n	67	8. 0	7,48 - 0,0006 n	63
8.20	3,61 - 0,0007 n	29	19.40	20,08 - 0,0037 n	69	8.20	8,11 - 0,0007 n	66
8.40	3,90 - 0,0007 n	31	20. 0	20,77 - 0,0038 n	69	8.40	8,77 - 0,0007 n	69
9. 0	4,21 - 0,0008 n	31	20.20	21,46 - 0,0039 n	71	9. 0	9,46 - 0,0008 n	71
9.20	4,52 - 0,0008 n	33	20.40	22,17 - 0,0041 n	72	9.20	10,17 - 0,0008 n	74
9.40	4,85 - 0,0009 n	34	21. 0	22,89 - 0,0042 n	74	9.40	10,91 - 0,0009 n	77
10. 0	5,19 - 0,0010 n	36	21.20	23,63 - 0,0043 n	74	10. 0	11,68 - 0,0009 n	79
10.20	5,55 - 0,0010 n	36	21.40	24,37 - 0,0045 n	75	10.20	12,47 - 0,0010 n	82
10.40	5,91 - 0,0011 n	37	22. 0	25,12 - 0,0046 n	77	10.40	13,29 - 0,0011 n	84
11. 0	6,28 - 0,0012 n	39	22.20	25,89 - 0,0047 n	78	11. 0	14,13 - 0,0011 n	87
11.20	6,67 - 0,0012 n	40	22.40	26,67 - 0,0049 n	79	11.20	15,00 - 0,0012 n	90
11.40	7,07 - 0,0013 n		23. 0	27,46 - 0,0050 n		11.40	15,90 - 0,0013 n	

* * The sign of the Correction is + above Pole and - below Pole for a direct observation; and - above Pole and + below Pole for a reflexion observation.

The following general Table of Corrections for Curvature of Path was calculated by the formula, Correction = $0'',1503 \times \tan. \text{Declination} \times (\text{Interval})^2$.

Corrections for curvature of path at given Intervals from the middle wire for given Declinations.

Decl ⁿ	Int. $\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	4	$4\frac{1}{4}$	$4\frac{1}{2}$	$4\frac{3}{4}$
0	0,00	0,00	0,01	0,01	0,02	0,03	0,04	0,05	0,07	0,08	0,10	0,12	0,14	0,16	0,18	0,21	0,24	0,27	0,30
10	0,00	0,01	0,01	0,03	0,04	0,06	0,08	0,11	0,13	0,17	0,20	0,24	0,28	0,32	0,37	0,42	0,48	0,54	0,60
15	0,00	0,01	0,02	0,04	0,06	0,09	0,12	0,16	0,20	0,25	0,30	0,36	0,43	0,49	0,57	0,64	0,73	0,82	0,91
20	0,00	0,01	0,03	0,05	0,09	0,12	0,17	0,22	0,28	0,34	0,41	0,49	0,58	0,67	0,77	0,88	0,99	1,11	1,23
22	0,00	0,02	0,03	0,06	0,09	0,14	0,19	0,24	0,31	0,38	0,46	0,55	0,64	0,74	0,85	0,97	1,10	1,23	1,37
24	0,00	0,02	0,04	0,07	0,10	0,15	0,20	0,27	0,34	0,42	0,51	0,60	0,71	0,82	0,94	1,07	1,21	1,36	1,51
26	0,00	0,02	0,04	0,07	0,11	0,16	0,22	0,29	0,37	0,46	0,55	0,66	0,77	0,90	1,03	1,17	1,32	1,48	1,65
28	0,01	0,02	0,05	0,08	0,12	0,18	0,24	0,32	0,40	0,50	0,60	0,72	0,84	0,98	1,12	1,28	1,44	1,62	1,80
30	0,01	0,02	0,05	0,09	0,14	0,20	0,27	0,35	0,44	0,54	0,66	0,78	0,92	1,06	1,22	1,39	1,57	1,76	1,96
32	0,01	0,02	0,05	0,09	0,15	0,21	0,29	0,38	0,48	0,59	0,71	0,85	0,99	1,15	1,32	1,50	1,70	1,90	2,12
34	0,01	0,03	0,06	0,10	0,16	0,23	0,31	0,41	0,51	0,63	0,77	0,91	1,07	1,24	1,43	1,62	1,83	2,05	2,29
36	0,01	0,03	0,06	0,11	0,17	0,25	0,33	0,44	0,55	0,68	0,83	0,98	1,15	1,34	1,54	1,75	1,97	2,21	2,46
38	0,01	0,03	0,07	0,12	0,18	0,26	0,36	0,47	0,59	0,73	0,89	1,06	1,24	1,44	1,65	1,88	2,12	2,38	2,65
40	0,01	0,03	0,07	0,13	0,20	0,28	0,39	0,50	0,64	0,79	0,95	1,14	1,33	1,54	1,77	2,02	2,28	2,55	2,85
42	0,01	0,03	0,08	0,14	0,21	0,30	0,41	0,54	0,69	0,85	1,02	1,22	1,43	1,66	1,90	2,17	2,44	2,74	3,05
44	0,01	0,04	0,08	0,15	0,23	0,33	0,44	0,58	0,73	0,91	1,10	1,31	1,53	1,78	2,04	2,32	2,62	2,94	3,27

Corrections for curvature of path at given Intervals from the middle wire for given Declinations, continued.

Decl ^a .	Int. $\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	4	$4\frac{1}{4}$	$4\frac{1}{2}$	$4\frac{3}{4}$
45	0,01	0,04	0,08	0,15	0,23	0,34	0,46	0,60	0,76	0,94	1,14	1,35	1,59	1,84	2,11	2,40	2,71	3,04	3,39
46	0,01	0,04	0,09	0,16	0,24	0,35	0,48	0,62	0,79	0,97	1,18	1,40	1,64	1,91	2,19	2,49	2,81	3,15	3,51
47	0,01	0,04	0,09	0,16	0,25	0,36	0,49	0,64	0,82	1,01	1,22	1,45	1,70	1,97	2,27	2,58	2,91	3,26	3,64
48	0,01	0,04	0,09	0,17	0,26	0,38	0,51	0,67	0,85	1,04	1,26	1,50	1,76	2,05	2,35	2,67	3,02	3,38	3,77
49	0,01	0,04	0,10	0,17	0,27	0,39	0,53	0,69	0,88	1,08	1,31	1,56	1,83	2,12	2,43	2,77	3,12	3,50	3,90
50	0,01	0,04	0,10	0,18	0,28	0,40	0,55	0,72	0,91	1,12	1,35	1,61	1,89	2,19	2,52	2,87	3,24	3,63	4,04
51	0,01	0,05	0,10	0,19	0,29	0,42	0,57	0,74	0,94	1,16	1,40	1,67	1,96	2,27	2,61	2,97	3,35	3,76	4,19
52	0,01	0,05	0,11	0,19	0,30	0,43	0,59	0,77	0,97	1,20	1,45	1,73	2,03	2,36	2,71	3,08	3,47	3,90	4,34
53	0,01	0,05	0,11	0,20	0,31	0,45	0,61	0,80	1,01	1,25	1,51	1,80	2,11	2,44	2,80	3,19	3,60	4,04	4,50
54	0,01	0,05	0,12	0,21	0,32	0,47	0,63	0,83	1,05	1,29	1,56	1,86	2,18	2,53	2,91	3,31	3,74	4,19	4,67
55	0,01	0,05	0,12	0,21	0,34	0,48	0,66	0,86	1,09	1,34	1,62	1,93	2,27	2,63	3,02	3,43	3,88	4,35	4,84
56	0,01	0,06	0,13	0,22	0,35	0,50	0,68	0,89	1,13	1,39	1,69	2,01	2,35	2,73	3,13	3,57	4,02	4,51	5,03
57	0,01	0,06	0,13	0,23	0,36	0,52	0,71	0,93	1,17	1,45	1,75	2,08	2,44	2,84	3,25	3,70	4,18	4,67	5,22
58	0,02	0,06	0,14	0,24	0,38	0,54	0,74	0,96	1,22	1,50	1,82	2,16	2,54	2,95	3,38	3,85	4,34	4,87	5,43
59	0,02	0,06	0,14	0,25	0,39	0,56	0,77	1,00	1,27	1,56	1,89	2,25	2,64	3,07	3,52	4,00	4,52	5,07	5,64
60	0,02	0,07	0,15	0,26	0,41	0,59	0,80	1,04	1,32	1,63	1,97	2,34	2,75	3,19	3,66	4,17	4,70	5,27	5,87
61	0,02	0,07	0,15	0,27	0,42	0,61	0,83	1,08	1,37	1,69	2,05	2,44	2,86	3,32	3,81	4,34	4,90	5,49	6,12
62	0,02	0,07	0,16	0,28	0,44	0,64	0,87	1,13	1,43	1,77	2,14	2,54	2,99	3,46	3,97	4,52	5,11	5,72	6,38
63	0,02	0,07	0,17	0,29	0,46	0,66	0,90	1,18	1,49	1,84	2,23	2,65	3,12	3,61	4,15	4,72	5,33	5,97	6,65
64	0,02	0,08	0,17	0,31	0,48	0,69	0,94	1,23	1,56	1,93	2,33	2,77	3,25	3,77	4,33	4,93	5,57	6,24	6,95
65	0,02	0,08	0,18	0,32	0,50	0,73	0,99	1,29	1,63	2,01	2,44	2,90	3,40	3,95	4,53	5,16	5,82	6,53	7,27
66. 0	0,02	0,08	0,19	0,34	0,53	0,76	1,03	1,35	1,71	2,11	2,55	3,04	3,57	4,14	4,75	5,40	6,10	6,84	7,62
66. 30	0,02	0,09	0,19	0,35	0,54	0,78	1,06	1,38	1,75	2,16	2,61	3,11	3,65	4,23	4,86	5,53	6,24	7,00	7,80
67. 0	0,02	0,09	0,20	0,35	0,55	0,80	1,08	1,42	1,79	2,21	2,68	3,19	3,74	4,34	4,98	5,67	6,39	7,17	7,99
67. 30	0,02	0,09	0,20	0,36	0,57	0,82	1,11	1,45	1,84	2,27	2,74	3,27	3,83	4,45	5,10	5,81	6,55	7,35	8,19
68. 0	0,02	0,09	0,21	0,37	0,58	0,84	1,14	1,49	1,88	2,32	2,81	3,35	3,93	4,56	5,23	5,95	6,72	7,53	8,39
68. 30	0,02	0,10	0,21	0,38	0,60	0,86	1,17	1,53	1,93	2,38	2,89	3,43	4,03	4,67	5,37	6,11	6,89	7,73	8,61
69. 0	0,02	0,10	0,22	0,39	0,61	0,88	1,20	1,57	1,98	2,45	2,96	3,52	4,14	4,80	5,51	6,26	7,07	7,93	8,83
69. 30	0,03	0,10	0,23	0,40	0,63	0,90	1,23	1,61	2,04	2,51	3,04	3,62	4,25	4,92	5,65	6,43	7,26	8,14	9,07
70. 0	0,03	0,10	0,23	0,41	0,65	0,93	1,26	1,65	2,09	2,58	3,12	3,72	4,36	5,06	5,81	6,61	7,46	8,36	9,32
70. 30	0,03	0,11	0,24	0,42	0,66	0,96	1,30	1,70	2,15	2,65	3,21	3,82	4,48	5,20	5,97	6,79	7,67	8,60	9,58
71. 0	0,03	0,11	0,25	0,44	0,68	0,98	1,34	1,75	2,21	2,73	3,30	3,93	4,61	5,35	6,14	6,98	7,88	8,84	9,85
71. 30	0,03	0,11	0,25	0,45	0,70	1,01	1,38	1,80	2,27	2,81	3,40	4,04	4,74	5,50	6,32	7,19	8,11	9,10	10,13
72. 0	0,03	0,12	0,26	0,46	0,72	1,04	1,42	1,85	2,34	2,89	3,50	4,16	4,89	5,67	6,50	7,40	8,35	9,37	10,44
72. 30	0,03	0,12	0,27	0,48	0,74	1,07	1,46	1,91	2,41	2,98	3,61	4,29	5,04	5,84	6,70	7,63	8,61	9,65	10,75
73. 0	0,03	0,12	0,28	0,49	0,77	1,11	1,51	1,97	2,49	3,07	3,72	4,42	5,19	6,02	6,91	7,87	8,88	9,96	11,09
73. 30	0,03	0,13	0,29	0,51	0,79	1,14	1,55	2,03	2,57	3,17	3,84	4,57	5,36	6,22	7,14	8,12	9,16	10,28	11,45
74. 0	0,03	0,13	0,29	0,52	0,82	1,18	1,61	2,10	2,65	3,28	3,96	4,72	5,54	6,42	7,37	8,39	9,47	10,61	11,83
74. 30	0,03	0,14	0,30	0,54	0,85	1,22	1,66	2,17	2,74	3,39	4,10	4,88	5,72	6,64	7,62	8,67	9,79	10,98	12,23
75. 0	0,04	0,14	0,32	0,56	0,88	1,26	1,72	2,24	2,84	3,51	4,24	5,05	5,92	6,87	7,89	8,97	10,13	11,36	12,65
75. 20	0,04	0,14	0,32	0,57	0,90	1,29	1,76	2,30	2,91	3,59	4,34	5,17	6,07	7,04	8,08	9,19	10,37	11,63	12,96
75. 40	0,04	0,15	0,33	0,59	0,92	1,32	1,80	2,35	2,98	3,68	4,45	5,29	6,21	7,21	8,27	9,41	10,62	11,91	13,27
76. 0	0,04	0,15	0,34	0,60	0,94	1,36	1,85	2,41	3,05	3,77	4,56	5,43	6,37	7,38	8,48	9,65	10,89	12,21	13,60
76. 20	0,04	0,15	0,35	0,62	0,97	1,39	1,89	2,47	3,13	3,86	4,67	5,56	6,53	7,57	8,69	9,89	11,16	12,52	13,94
76. 40	0,04	0,16	0,36	0,63	0,99	1,43	1,94	2,54	3,21	3,96	4,80	5,71	6,70	7,77	8,92	10,15	11,45	12,84	14,31
77. 0	0,04	0,16	0,37	0,65	1,02	1,46	1,99	2,60	3,30	4,07	4,92	5,86	6,88	7,97	9,15	10,42	11,76	13,18	14,69
77. 20	0,04	0,17	0,38	0,67	1,05	1,50	2,05	2,67	3,39	4,18	5,06	6,02	7,06	8,19	9,40	10,70	12,08	13,54	15,09
77. 40	0,04	0,17	0,39	0,69	1,07	1,55	2,11	2,75	3,48	4,30	5,20	6,19	7,26	8,42	9,67	11,00	12,42	13,92	15,51
78. 0	0,04	0,18	0,40	0,71	1,10	1,59	2,17	2,83	3,58	4,42	5,35	6,36	7,47	8,66	9,94	11,31	12,77	14,32	15,95
78. 20	0,05	0,18	0,41	0,73	1,14	1,64	2,23	2,91	3,68	4,55	5,50	6,55	7,69	8,92	10,24	11,65	13,15	14,74	16,42
78. 30	0,05	0,18	0,42	0,74	1,15	1,66	2,26	2,95	3,74	4,62	5,59	6,65	7,80	9,05	10,39	11,82	13,34	14,96	16,67
78. 40	0,05	0,19	0,42	0,75	1,17	1,69	2,30	3,00	3,80	4,69	5,67	6,75	7,92	9,19	10,54	12,00	13,54	15,18	16,92

* * For a direct observation the sign of the Correction is + North of the Equator and above the Pole, and - South of the Equator and below the Pole. For a reflexion observation the signs are the opposite to those for a direct observation.

The Table which next follows contains the values of the quantity,

$$\frac{16,6}{3600} \times \text{sec. Declination} \times \text{horary variation of Declination,}$$

for declinations in integral degrees from 0° to 40°, and for horary variations in integral seconds from 1" to 10". Hence as the values for the horary variations 0",1, 0",2, 0",3 &c, 20", 30", 40", &c., are inferred by merely changing the place of the decimal point, the value for *any* horary variation less than 200" may be obtained by simple addition. The Table consequently gives the means of calculating the corrections for change of N.P.D. of the Sun and Planets in one interval from the middle wire, whence the correction for any number of intervals noted in an observation may be deduced by multiplying the correction given by the Table by that number of intervals.

Corrections for change of N.P.D. of the Sun and Planets in one interval from the middle wire, for given declinations and given horary variations of declination.

Decl.	Hor. Var. 1"	2"	3"	4"	5"	6"	7"	8"	9"	10"
0	0,0046	0,0092	0,0138	0,0184	0,0231	0,0277	0,0323	0,0369	0,0415	0,0461
1	0,0046	0,0092	0,0138	0,0184	0,0231	0,0277	0,0323	0,0369	0,0415	0,0461
2	0,0046	0,0092	0,0138	0,0185	0,0231	0,0277	0,0323	0,0369	0,0415	0,0461
3	0,0046	0,0092	0,0139	0,0185	0,0231	0,0277	0,0323	0,0369	0,0416	0,0462
4	0,0046	0,0092	0,0139	0,0185	0,0231	0,0277	0,0324	0,0370	0,0416	0,0462
5	0,0046	0,0093	0,0139	0,0185	0,0231	0,0278	0,0324	0,0370	0,0417	0,0463
6	0,0046	0,0093	0,0139	0,0185	0,0232	0,0278	0,0325	0,0371	0,0417	0,0464
7	0,0046	0,0093	0,0139	0,0186	0,0232	0,0279	0,0325	0,0372	0,0418	0,0465
8	0,0047	0,0093	0,0140	0,0186	0,0233	0,0279	0,0326	0,0373	0,0419	0,0466
9	0,0047	0,0093	0,0140	0,0187	0,0233	0,0280	0,0327	0,0373	0,0420	0,0467
10	0,0047	0,0094	0,0140	0,0187	0,0234	0,0281	0,0328	0,0375	0,0421	0,0468
11	0,0047	0,0094	0,0141	0,0188	0,0235	0,0282	0,0329	0,0376	0,0423	0,0470
12	0,0047	0,0094	0,0141	0,0189	0,0236	0,0283	0,0330	0,0377	0,0424	0,0471
13	0,0047	0,0095	0,0142	0,0189	0,0237	0,0284	0,0331	0,0379	0,0426	0,0473
14	0,0048	0,0095	0,0143	0,0190	0,0238	0,0285	0,0333	0,0380	0,0428	0,0475
15	0,0048	0,0095	0,0143	0,0191	0,0239	0,0286	0,0334	0,0382	0,0430	0,0477
16	0,0048	0,0096	0,0144	0,0192	0,0240	0,0288	0,0336	0,0384	0,0432	0,0480
17	0,0048	0,0096	0,0145	0,0193	0,0241	0,0289	0,0338	0,0386	0,0434	0,0482
18	0,0048	0,0097	0,0145	0,0194	0,0242	0,0291	0,0339	0,0388	0,0436	0,0485
19	0,0049	0,0098	0,0146	0,0195	0,0244	0,0293	0,0341	0,0390	0,0439	0,0488
20	0,0049	0,0098	0,0147	0,0196	0,0245	0,0294	0,0343	0,0393	0,0442	0,0491
21	0,0049	0,0099	0,0148	0,0198	0,0247	0,0296	0,0346	0,0395	0,0445	0,0494
22	0,0050	0,0099	0,0149	0,0199	0,0249	0,0298	0,0348	0,0398	0,0448	0,0497
23	0,0050	0,0100	0,0150	0,0200	0,0250	0,0301	0,0351	0,0401	0,0451	0,0501
24	0,0050	0,0101	0,0151	0,0202	0,0252	0,0303	0,0353	0,0404	0,0454	0,0505
25	0,0051	0,0102	0,0153	0,0204	0,0254	0,0305	0,0356	0,0407	0,0458	0,0509
26	0,0051	0,0103	0,0154	0,0205	0,0257	0,0308	0,0359	0,0410	0,0462	0,0513
27	0,0052	0,0104	0,0155	0,0207	0,0259	0,0311	0,0362	0,0414	0,0466	0,0518
28	0,0052	0,0104	0,0157	0,0209	0,0261	0,0313	0,0366	0,0418	0,0470	0,0522
29	0,0053	0,0105	0,0158	0,0211	0,0264	0,0316	0,0369	0,0422	0,0474	0,0527
30	0,0053	0,0106	0,0160	0,0213	0,0266	0,0319	0,0373	0,0426	0,0479	0,0532
31	0,0054	0,0108	0,0161	0,0215	0,0269	0,0323	0,0377	0,0430	0,0484	0,0538
32	0,0054	0,0109	0,0163	0,0217	0,0272	0,0326	0,0381	0,0435	0,0489	0,0544
33	0,0055	0,0110	0,0165	0,0220	0,0275	0,0330	0,0385	0,0440	0,0495	0,0550
34	0,0056	0,0111	0,0167	0,0222	0,0278	0,0334	0,0389	0,0445	0,0501	0,0556
35	0,0056	0,0113	0,0169	0,0225	0,0281	0,0338	0,0394	0,0450	0,0507	0,0563
36	0,0057	0,0114	0,0171	0,0228	0,0285	0,0342	0,0399	0,0456	0,0513	0,0570
37	0,0058	0,0115	0,0173	0,0231	0,0289	0,0346	0,0404	0,0462	0,0520	0,0577
38	0,0059	0,0117	0,0176	0,0234	0,0293	0,0351	0,0410	0,0468	0,0527	0,0585
39	0,0059	0,0119	0,0178	0,0237	0,0297	0,0356	0,0415	0,0475	0,0534	0,0593
40	0,0060	0,0120	0,0181	0,0241	0,0301	0,0361	0,0421	0,0482	0,0542	0,0602

When the sign of the horary variation of declination in the Nautical Almanac is —, the sign of the correction is + before passing the middle wire and — after passing. When the sign of the horary variation of declination is + in the Nautical Almanac, the sign of the correction is — before passing the middle wire and + after passing.

The Table actually employed for computing the corrections for curvature of path of Polaris and δ Ursæ Minoris, was calculated for the mean declinations of these stars, Jan. 1, 1840, viz. $88^{\circ}.27'.22''$, and $86^{\circ}.35'.29''$. The corrections are consequently slightly erroneous when the interval of the observation from meridian transit is considerable. This was the case in the observations of Polaris on March 1, April 23, June 20, and July 22, on which days the error amounts to about $0''.1$, and on April 24, in which case alone the error amounts to $0''.2$. In the observation of δ Ursæ Minoris February 16, and in those of Polaris March 2, March 26, April 25, and Sept. 26, the error of the correction falls below $0''.05$, and in all other cases it is quite inappreciable. The same Table was used for the observations of Polaris in 1845, but the corrections applied are in no case erroneous, the observations being taken near the meridian. Also, instead of the third of the above Tables, one differing in form and requiring interpolations, was made use of, and consequently the corrections applied for change of N.P.D. may deviate in some instances in the second place of decimals from the exact values obtained by means of that Table.

The *Pointer*, (which is used for setting the Telescope for observing an object either directly or by reflexion after computing to the nearest minute a working catalogue of

setting angles), is placed *below* microscope *A* at an interval of $10^{\circ}.45'$ nearly from the zero of its reading. The graduation proceeding in the direction from the microscope to the pointer, the pointer reading, (which is taken by sight), is the degrees and minutes of that division which in the order of graduation comes next before the position of the pointer. It has been thought unnecessary to place the pointer reading in a separate column, as it may be at once inferred from the concluded circle reading, the minutes being always an integral number of $5'$. As first set down, it is sometimes erroneous by a multiple of $5'$, but as the error is readily detected in the computations, no notice is taken of it in the notes.

The concluded circle reading in the *eleventh column* is the *Pointer reading* added to the mean of the microscope readings with all the above corrections applied. It is, therefore, the reading which would have been given by the circle, if the microscopes had been in accurate adjustment for runs, and the object had been bisected by the fixed wire at the middle vertical wire. For Polaris and δ Ursæ Minoris, the concluded reading applies to the time of meridian passage. If the circle were perfectly graduated, and always retained the circular form, and if the bisections of the divisions were accurately performed, different circle readings obtained in the manner just stated, would be comparable with each other though determined by a single microscope, provided also the zero of the microscope reading retained a fixed position relatively to the axis of the circle. Errors from imperfect graduation, inaccurate bisections, and deviation from the circular form, may be presumed to be corrected in great measure by the use of six microscopes, disposed at the opposite ends of diameters, and at equal intervals round the circle. It appears, however, that there is a residual inequality, which will be presently noticed.

The mean between the two concluded circle readings for the reflexion and direct observations of the same star at the same transit, is the reading corresponding to a horizontal position of the Telescope, and, increased or diminished by 90° , gives the reading when the Telescope is directed to the zenith. This mean reading is called, for the sake of brevity, a "zenith point." As the zenith points derived from observations taken at different zenith distances are found to be discordant with each other, a zenith point obtained by the following rule is adopted. The stars observed by reflexion and directly within 15° of the zenith are divided into two groups, one north, the other south, of the zenith. The mean of the zenith points of each group is supposed to correspond to the mean of the zenith distances, and from these two mean zenith points at given distances from the zenith, the zenith point corresponding to the zenith is deduced by interpolation. This is the adopted zenith point, which with the day on which it is first used, is mentioned in the space below the columns. The difference between the adopted zenith point and the zenith point given by a particular double observation, may be considered as a measure of the discordance at the corresponding zenith distance, and may be employed in obtaining a correction for it, as will be shewn further on. The amount of this difference in each instance is readily seen by inspecting the columns of 'Apparent N.P.D. from the observation,' being equal to *half* the difference between the N.P.D. by the direct and reflexion observations.

The interval during which the same zenith point is used, includes all observations in the course of which no considerable variation of the separate zenith points, distinct from the discordance above mentioned, can be recognised. Usually the changes of adopted zenith points are due to instrumental adjustments; but it also happens that gradual changes from unknown causes make the adoption of a new zenith point necessary.

In the latter half of 1844 the zenith points were also obtained by means of Bohnenberger's collimating eye-piece, employed in a manner analogous to that before stated in describing the use of this instrument for finding the error of collimation of the Transit. These determinations have not however

been used, the immediate object of making them being to ascertain whether they exhibited any constant variation from the adopted zenith points. The subjoined Table, preceded by an example of the process by which the zenith point is obtained by the collimating eye-piece, contains a comparison of results given by the two methods.

July 31, 2^h, the zenith point was determined by the collimating eye-piece as follows. The Telescope was nearly directed to the nadir point, and, the micrometer wire being so placed that its image, the fixed wire, the image of the fixed wire, and the micrometer wire itself, were in order of succession, the three spaces between the four lines were by the judgment of the eye made equal. Thus the distance of the fixed wire from the direction of the nadir point was *one fourth* the interval between the fixed and micrometer wires. Hence the micrometer reading for this position of the micrometer wire and that for coincidence with the fixed wire being ascertained, the reading for the nadir direction was readily inferred. The concluded circle reading for the nadir direction, and by consequence the zenith point, was then obtained just as if a celestial object in the zenith had been bisected by the micrometer wire. The measures were taken by two observers and in two positions of the Telescope.

First set of Measures.

Micrometer reading by C.	Micrometer reading by G.	Circle reading.
9,092	9,069	Pointer 201°. 50' "
9,063	9,053	Microscope A 3. 16,6
9,055	9,055	B 9,5
9,079	9,033	C 7,6
		D 8,1
		E 7,9
		F 9,1
Means 9,072	9,053	Correction for Runs - 2'', 7 ... - 1,7
Coincidence reading . 10,210	10,210	Mean Circle reading 201. 53. 9,52
Difference 1,138	1,157	Micrometer correction + 5,98
One-fourth the differ°. 0,285	0,289	Zenith Point 21. 53. 15,50

Hence the mean micrometer correction by the two observers = + 0', 287 × 20'', 838 = + 5'', 98.

Second set of Measures.

Micrometer reading by C.	Micrometer reading by G.	Circle reading.
11,092	11,079	Pointer 201°. 50' "
11,077	11,085	Microscope A 3. 26,0
11,095	11,099	B 20,0
11,085	11,090	C 17,7
		D 18,5
		E 18,6
		F 20,0
Means 11,087	11,088	Correction for Runs - 2'', 7 ... - 1,8
Coincidence reading . 10,210	10,210	Mean Circle reading 201. 53. 19,83
Difference 0,877	0,878	Micrometer correction - 4,56
One-fourth the differ°. 0,219	0,219	Zenith Point 21. 53. 15,27

Hence the micrometer correction by the two observers = - 0', 219 × 20'', 838 = - 4'', 56.

The mean zenith point given by the two sets of measures is 21°. 53'. 15'', 38.

Zenith Points in 1844 obtained by the Collimating Eye-piece.

Date of Observation.	Zenith Point.	Mean Zenith Point.	Adopted Zenith Point.	Difference.	Date of Observation.	Zenith Point.	Mean Zenith Point.	Adopted Zenith Point.	Difference.
July 31	21° 53' 15,38	"	"	"	Nov. 11	21° 53' 14,49	"	"	"
Aug. 12	14,47	15,08	14,64	+ 0,44	17	13,33	13,85	14,59	- 0,74
18	15,64				25	13,73			
25	14,71				Dec. 2	14,04			
Sept. 1	15,20				8	13,80			
9	15,61	15,69	15,04	+ 0,65	16	12,88	13,40	13,52	- 0,12
16	15,35				22	13,21			
22	15,62				29	13,08			
29	16,20								
Oct. 6	16,16	15,73	15,01	+ 0,72					
27	15,30								

The zenith points grouped together were observed generally within the interval during which the adopted zenith point with which the mean of them is compared, was made use of. The mean of all the differences is + 0",18. It appears by these comparisons that the zenith points given by the collimating eye-piece do not differ in any constant manner from those obtained by reflexion observations of stars.

The apparent zenith distance, in the direct observation of any object, is the algebraic excess of the concluded circle reading above the adopted zenith point, and for a reflexion observation it is the algebraic excess of the nadir point above the concluded circle reading. The object is North or South of the zenith according as the excess is in either case positive or negative. The apparent zenith distance thus obtained is used with the data in the three next columns for the calculation of *refraction*.

The *twelfth column* has the height of the barometer as shewn by a cistern-barometer constructed by Dollond, and attached to the circle pier. The lower surface of the mercury is raised by a screw pressing the bag till the light seen below a brass edge is excluded; and a brass slider is brought to the upper surface to shut out the light in the same way. As it appeared by a comparison of this with six other barometers (the particulars of which are given in the volume for 1835, p. xxxi.) that its readings were too small by 0,1 inch nearly, the height immediately read from the barometer, which is that recorded in column twelve, is always increased by that quantity in calculating the refraction.

The *thirteenth column* has the reading of the thermometer whose bulb is plunged in the cistern of the barometer.

The *fourteenth column* contains the reading of an external thermometer, which is fixed to a stage near the north shutter-opening at a distance of four feet from the wall of the building and nine feet from the ground. It is protected from radiation and the weather, and contiguous parts of the building prevent the direct rays of the Sun falling upon it.

The refraction is calculated by Bessel's tables, (*Tabulæ Regiomontanæ*, p. 538, &c.) by making use of the appendix to the *Greenwich Observations* of 1836. In this mode of calculating the reading of the attached is supposed to be the same as that of the external thermometer. The former reading, though not made use of, is inserted in the printed columns, to allow of correcting, if thought necessary, for the error of this supposition.

By adding the refraction to the apparent zenith distance North or South, the true zenith distance is found, and by adding algebraically the true zenith distance, considered negative when north of the zenith, to the assumed co-latitude of the observatory, viz. 37°. 47'. 8",28, the 'apparent N.P.D. from the observation,' given in the *fifteenth column*,

is obtained. The result is, therefore, the North Polar Distance of the object named in column 2, at the time of its passing the middle wire, affected, in the case of a body of the Solar System, by *parallax*, and, in every case, affected by uncorrected instrumental errors and errors of observation, as also by any errors in the assumed values of the constants employed in the calculations. The negative sign denotes that the object was observed below the pole*.

The *last column* contains the initial of the observer's name. The letter B indicates that the observation was taken by Mr Berry, and the letter G that it was taken by Mr Glaisher.

IV. *Mean North Polar Distances of Stars as deduced from the observations of each day, with a Catalogue of the concluded Mean North Polar Distances, Jan. 1, 1844. Pages 102—121.*

The columns in pages 102—116 contain the names of the stars in order of Right Ascension, the days on which each star was observed, the corrections to be applied to the apparent N.P.D. already calculated, to obtain the mean N.P.D., and the resulting mean N.P.D. Jan. 1, 1844, given by each day's observation. The results by the same star, when observed above, and when below the pole, are arranged separately to serve for correcting the assumed co-latitude. Also, the results by direct observations are separated from those by reflexion observations of the same star, for the purpose of exhibiting the effect of the discordance of zenith points, and furnishing data for applying a correction. A mean N.P.D. which is included in brackets is not made use of in deducing the concluded mean.

The corrections applied to the apparent N.P.D. are obtained as follows. For stars included in the list of the Nautical Almanac, the corrections are the algebraic excesses of the apparent above the mean declinations of that work, South declinations being considered negative. For stars not in the Nautical Almanac, but included in the Catalogue of the Royal Astronomical Society, the corrections are calculated by the formula, $Aa' + Bb' + Cc' + Dd'$, $\log A$, $\log B$, $\log C$, $\log D$, being taken from the Nautical Almanac, and $\log a'$, $\log b'$, $\log c'$, $\log d'$, from the Society's Catalogue. For stars not in that Catalogue, the corrections are calculated by the following formula, depending on the expressions for a' , b' , c' , d' given in p. xvii of the Preface:

$$\begin{aligned} \text{Correction} = & A \times (\text{No. log} = 9,6375) \times \sin \text{N.P.D.} - A \sin \text{R.A.} \cos \text{N.P.D.} \\ & + B \cos \text{R.A.} \cos \text{N.P.D.} + C \times (\text{No. log} = 1,3020) \times \cos \text{R.A.} - D \sin \text{R.A.} \end{aligned}$$

A *Catalogue of the concluded Mean North Polar Distances, Jan. 1, 1844, with the Annual Variations* is contained in pages 117—121. The concluded mean is the mean of all the preceding mean N.P.D., corrected for the discordance of zenith points and the error of the assumed co-latitude, in the manner about to be explained. The annual variations are either taken from the Nautical Almanac, or are computed by the formula, $-20'',0553 \times \cos \text{R.A.}$, the constant of which is derived from the *Tabulæ Regiomont.* p. x. Proper motions are not taken into account unless they are included in the annual variations adopted from the Nautical Almanac. For greater ease in identifying the stars, columns of their mean R.A. Jan. 1, 1844, to the nearest second are added, and of anonymous stars the approximate magnitudes are also mentioned. The component of a double or multiple star to which the N.P.D. applies, is indicated in the manner, and according to the considerations, stated in p. xxii with reference to the Catalogue of R.A.

* In former Volumes there are columns containing the apparent zenith distance and the amount of refraction, which, for the sake of gaining space, have been omitted in this Volume. As the apparent zenith distance is the difference between the concluded circle reading and the adopted zenith point, and the true zenith distance the difference between the apparent N.P.D. and the assumed colatitude, the amount of refraction actually employed is readily deducible.

Corrections are applied to the mean of all the different determinations of mean N.P.D. for error of the assumed co-latitude, and for discordance of zenith points. The former correction is derived from a new determination of the colatitude of the Observatory, calculated from all the observations of the same stars above and below pole which were made in the years 1836, 1837, and 1838. The calculation is given in pages liii—lviii of the Introduction to the Volume of 1838, and the result is, that the assumed colatitude $37^{\circ}.47', 8'', 28$ should be corrected by $+0'', 09$. This quantity is accordingly added algebraically to the mean N.P.D., considering them negative when the observations are below the pole.

The correction for discordance of zenith points is applied on the following principle. The discordance is of such a nature, that the circle reading for zenith point is in general less by a star observed south of the zenith than by a star observed north of the zenith. Apparently when the object-glass is to the south of zenith, the Telescope, whether directed to the heavens or the trough of mercury, requires to be turned for bisecting an object, a little farther in the direction of the graduation, than if the cause of inequality did not exist; and when the object-glass is to the north of zenith, a little in the contrary direction. Whatever may be the cause of the discordance, the error it produces may be presumed to be corrected by reducing the different zenith points to the zenith point corresponding to a *given* zenith distance. Hence, if M be the zenith point adopted according to the rule explained in page xxx, and Z the zenith point resulting from a particular double observation south of zenith, $M-Z$ is the error of the circle reading in defect, both for the reflexion and the direct observation, supposing both to be equally affected by the inequality. By this quantity the N.P.D. is too small as determined by the direct observation, and too great as determined by the reflexion observation; so that the algebraic excess of the latter determination above the other is twice $M-Z$. This rule applies to observations north of the zenith, by taking the N.P.D. negative when the star is observed below the pole. The following table exhibits for each star observed directly and by reflexion, the mean value of $M-Z$, derived from the lists in pages 102—116 by halving the algebraic excess of the mean of the N.P.D. by reflexion above the mean of the corresponding N.P.D. by direct vision.

Mean Excess for each Star of the adopted Zenith Point above the Zenith Points given by Observation in 1844.

Star's Name.	Zen. Dist.	No. of Obs.	Mean value of $M-Z$.	Star's Name.	Zen. Dist.	No. of Obs.	Mean value of $M-Z$.
δ Ursæ Minoris SP.	$-41^{\circ}.11'$	3	$-0,34$	α Ursæ Majoris.	$-10^{\circ}.22'$	3	$-0,78$
Polaris SP.....	39. 18	17	$-0,16$	α Cephei.....	9. 43	11	$-0,18$
Polaris	36. 16	27	$-0,73$	η Draconis.....	9. 39	5	$-0,82$
δ Ursæ Minoris.....	34. 23	8	$-0,66$	1 Lyncis.....	9. 20	5	$-0,54$
π Cephei.....	22. 20	1	$-0,19$	η Cephei.....	9. 1	1	$+0,36$
λ Draconis.....	17. 58	1	$-1,16$	\circ Ursæ Majoris.....	9. 1	3	$-0,64$
β Cephei	17. 40	3	$-0,98$	ν Cephei.....	8. 11	1	$-0,79$
ρ Draconis.....	15. 13	1	$-0,07$	γ Cassiopeiæ	7. 40	2	$-0,52$
α Camelopardali.	13. 51	2	$-0,63$	31 Camelopardali ...	7. 38	1	$-0,13$
h^1 Draconis	13. 9	8	$-1,23$	ν Ursæ Majoris.....	7. 33	5	$-0,13$
α Draconis.....	12. 54	4	$-0,95$	ι Draconis	7. 18	4	$+0,27$
g Draconis.....	12. 40	1	$-0,74$	\circ Draconis.....	6. 59	5	$-0,68$
h Ursæ Majoris.....	$-11^{\circ}.32'$	3	$-0,08$	θ Draconis.....	6. 46	4	$-0,58$
				15 Lyncis	$-6^{\circ}.24'$	5	$-0,21$

Mean Excess for each Star of the adopted Zenith Point above the Zenith Points given by Observation in 1844, continued.

Star's Name.	Zen. Dist.	No. of Obs.	Mean value of M—Z.	Star's Name.	Zen. Dist.	No. of Obs.	Mean value of M—Z.
δ Ursæ Majoris.....	-5.41	5	-0.05	ϵ Leonis.....	$+27.44$	2	$+0.86$
37 Ursæ Majoris.....	5.40	3	$+0.16$	ζ Andromedæ.....	28.48	1	-0.03
B.A.C. 8188.....	5.29	3	-1.07	α Arietis.....	29.29	1	$+0.69$
δ Cephei.....	5.24	2	-0.22	δ Geminorum.....	29.57	6	$+0.57$
23 Lyncis.....	5.13	3	-0.67	ζ Geminorum.....	31.25	5	$+0.41$
ξ Draconis.....	4.41	1	-0.70	Arcturus.....	32.13	8	$+0.87$
ϵ Ursæ Majoris.....	4.35	6	$+0.04$	η Bootis.....	33.2	2	$+1.24$
53 Draconis.....	4.23	2	$+0.10$	γ Geminorum.....	35.41	6	$+0.80$
ϵ Cephei.....	4.3	1	-0.31	Aldebaran.....	36.2	7	$+0.86$
α Cassiopeiæ.....	3.28	9	-0.12	α Herculis.....	37.39	4	$+1.10$
ν^1 Draconis.....	3.5	1	-0.99	η Piscium.....	37.41	1	$+1.30$
i Persei.....	2.55	6	-0.37	α Pegasi.....	37.52	1	$+0.76$
γ Ursæ Majoris.....	-2.21	1	$+0.19$	γ Pegasi.....	37.54	2	$+0.25$
21 Canum Venat....	$+1.43$	3	$+0.89$	ζ Aquilæ.....	38.35	1	$+0.12$
η Ursæ Majoris.....	2.7	16	$+0.28$	Regulus.....	39.29	5	$+0.25$
θ Cygni.....	2.21	2	-0.16	α Ophiuchi.....	39.32	3	$+0.14$
α Persei.....	2.55	8	$+0.11$	ϵ Virginis.....	40.25	1	$+1.95$
i Ursæ Majoris.....	3.34	7	-0.02	β Cancræ.....	42.33	4	$+0.03$
χ Ursæ Majoris.....	3.34	2	$+0.24$	α Virginis.....	42.37	5	-0.16
π^2 Cygni.....	3.38	3	-0.10	ϵ Pegasi.....	43.3	1	$+0.05$
ω^2 Cygni.....	3.47	2	$+0.68$	π Leonis.....	43.26	3	-1.02
i Bootis.....	3.57	8	$+0.43$	α Orionis.....	44.51	3	$+0.71$
8 Andromedæ.....	4.3	7	-0.05	ϵ Hydræ.....	45.14	2	$+0.60$
μ Persei.....	4.13	3	$+0.26$	α Serpentis.....	45.18	2	$+0.01$
δ Persei.....	4.56	2	-0.18	δ Hydræ.....	45.58	1	$+0.92$
32 Cygni.....	4.59	4	$+0.21$	β Aquilæ.....	46.12	1	$+0.35$
τ Herculis.....	5.32	6	$+0.05$	Procyon.....	46.36	1	$+1.14$
52 Herculis.....	5.58	10	$+0.08$	i Piscium.....	47.26	3	-0.17
i Herculis.....	6.7	2	-0.88	σ Ophiuchi.....	47.56	1	-0.42
Capella.....	6.23	13	$+0.26$	α Ceti.....	48.45	1	$+0.52$
ψ Andromedæ.....	6.40	4	$+0.18$	γ Ophiuchi.....	49.27	1	-0.07
ψ Ursæ Majoris.....	6.52	3	$+0.45$	γ Virginis.....	52.49	1	$+0.39$
β Aurigæ.....	7.18	7	$+0.95$	ζ Aquarii.....	53.2	1	-0.72
δ Cygni.....	7.28	1	$+0.67$	α Aquarii.....	53.17	3	-0.31
α Cygni.....	7.29	11	$+0.48$	η Serpentis.....	55.9	1	-0.73
ξ Andromedæ.....	7.30	1	$+0.58$	β Aquarii.....	58.28	3	$+0.27$
ω Ursæ Majoris.....	8.12	4	$+0.58$	α Hydræ.....	60.12	3	$+0.34$
λ Ursæ Majoris.....	8.32	4	-0.02	Rigel.....	60.36	4	$+0.79$
ϵ Aurigæ.....	8.38	2	$+0.05$	β Libræ.....	61.1	1	$+0.75$
γ Andromedæ.....	10.38	4	$+0.77$	θ Ceti.....	61.12	1	$+0.04$
η Aurigæ.....	11.12	2	$+0.32$	ϵ Aquarii.....	62.17	1	-0.62
ϵ Persei.....	12.40	1	$+1.05$	ζ Ophiuchi.....	62.28	2	$+0.32$
α Canum Venat....	13.3	2	$+0.84$	Spica.....	62.34	7	$+0.76$
γ Bootis.....	13.13	9	$+0.60$	α^2 Capricorni.....	65.14	3	-0.45
α Lyræ.....	13.34	12	$+0.51$	δ Crateris.....	66.9	2	$+0.49$
61 ¹ Cygni.....	14.14	5	$+0.54$	γ Eridani.....	66.10	2	-0.18
β Lyræ.....	19.2	1	$+0.87$	i Aquarii.....	66.50	1	$+0.63$
Castor.....	20.0	5	$+0.36$	α^2 Libræ.....	67.36	2	-0.07
ζ Herculis.....	20.20	5	$+0.24$	δ Corvi.....	67.52	1	$+0.72$
42 Leonis Minoris..	20.43	4	$+0.23$	μ Hydræ.....	68.16	1	$+0.36$
β Coronæ Borealis..	22.34	2	$+0.08$	τ Ceti.....	68.59	1	$+1.20$
β Tauri.....	23.45	2	$+1.00$	β Canis Majoris....	70.6	2	$+0.05$
Pollux.....	23.49	10	$+0.49$	β Ceti.....	71.4	3	$+0.57$
α Andromedæ.....	23.59	6	$+1.04$	μ^1 Sagittarii.....	73.19	1	$+2.00$
ϵ Bootis.....	24.29	2	$+0.87$	τ^6 Eridani.....	74.23	2	$+1.48$
α Coronæ Borealis..	$+24.58$	1	$+0.89$	Antares.....	$+78.18$	1	$+0.84$

From the foregoing table the corrections to be applied to N.P.D. observed directly, were deduced as follows. The above mean values of $M-Z$ were divided into groups the limits of which (indicated by the lines across) were chosen so that the stars of each group do not greatly differ in zenith distance. Each mean value in the group was multiplied by the number of observations by which it was determined, and the corresponding zenith distance by the same number. The sum of each series of products being divided by the whole number of observations in the group, the resulting value of $M-Z$ was considered to belong to the resulting zenith distance. A line of abscissæ was then drawn on which these zenith distances were set off, and the corresponding values of $M-Z$ being taken for ordinates, a curve was traced by hand among the points thus laid down, so as to approach nearer to any point, the greater the number of observations by which its position was determined. Ordinates of this curve were then measured at intervals of 5° , and the measures with the corresponding N.P.D. were tabulated, to serve for obtaining by interpolation the correction for any proposed N.P.D. From what has already been said, the sign of the correction for a direct observation is the same as that of $M-Z$, or the ordinate of the curve, and for a reflexion observation, the contrary sign. In the subjoined table the correction $+0''.09$ for error of assumed colatitude is included.

Corrections for Discordance of Zenith Points and Error of Assumed Colatitude, applied to N.P.D. obtained by direct and reflexion observations in 1844.

N.P.D.	Correction to direct observation.	Correction to reflexion observation.	N.P.D.	Correction to direct observation.	Correction to reflexion observation.	N.P.D.	Correction to direct observation.	Correction to reflexion observation.
0°			35°			80°		
- 10	+ 0,36	- 0,18	40	- 0,11	+ 0,29	85	+ 0,40	- 0,22
- 5	- 0,04	+ 0,22	45	+ 0,24	- 0,06	90	0,00	+ 0,18
0	- 0,43	+ 0,61	50	+ 0,49	- 0,31	95	- 0,08	+ 0,26
+ 5	- 0,64	+ 0,82	55	+ 0,55	- 0,37	100	- 0,03	+ 0,21
10	- 0,75	+ 0,93	60	+ 0,51	- 0,33	105	+ 0,19	- 0,01
15	- 0,80	+ 0,98	65	+ 0,48	- 0,30	110	+ 0,64	- 0,46
20	- 0,80	+ 0,98	70	+ 0,61	- 0,43	115	+ 0,95	- 0,77
25	- 0,66	+ 0,84	75	+ 0,85	- 0,67	120	+ 1,07	- 0,89
30	- 0,30	+ 0,48		+ 0,86	- 0,68		+ 1,12	- 0,94

V. *Sidereal Intervals occupied by transits of the Sun's Diameter, and Vertical Diameters of the Sun, Moon, and the planet Venus.* Pages 124—126.

The sidereal intervals are the differences of the concluded transits of the first and second limbs over the mean of the seven wires, extracted from column 10 of the observed R.A.

The vertical diameters by observation are the differences of the apparent N.P.D. of the North and South Limbs, extracted from the Circle observations, and subsequently corrected for difference of parallax of the Limbs in the cases of the Sun and Moon, and for defect of illumination of one of the Limbs in the cases of the Moon and Venus. The formulæ for calculating parallaxes will be given hereafter: the following methods were employed for calculating the corrections for defect of illumination.

For the Moon, when nearly full, which was the case on June 29 and Aug. 27, the difference between the apparent N.P.D. of her centre, and the N.P.D. of the point opposite the Sun was first ascertained. Calling this difference θ , and the Moon's apparent diameter Δ , the correction required is $\Delta \tan^2 \frac{\theta}{2}$. The North or South Limb is defective according as the apparent N.P.D. of the Moon's centre is greater or less than that of the point opposite the Sun.

To compute the correction for the form of the disk of Venus, draw an arc SN through S the Sun's place perpendicular to the circle of declination PN through V the place of Venus, and let the values of SN and PN be calculated by the right-angled spherical triangle SPN , in which SP and the angle SPN are known. The North or South Limb is defective according as PN is greater or less than PV . Let $SN=p$, and the difference between PV and $PN=q$. Then, if Venus be gibbous, R being the Earth's radius vector and r that of Venus, $\sin \theta' = \frac{R}{r} \cos p \sin q$, and correction $= \Delta \tan^2 \frac{\theta'}{2}$, Δ being the difference between the N.P.D. of the limbs given by the Circle observation. If Venus be horned, $\tan \theta = \cot p \sin q$, and correction $= \Delta \tan^2 \frac{\theta}{2}$. Venus was horned from May 12 to Oct. 1, and gibbous the rest of the year. The correction thus obtained, added to Δ , gives the true diameter by observation.

The tabular intervals occupied by transits of the Sun's diameter, and the tabular diameters of the Sun, Moon, and Venus, are taken from the Nautical Almanac. The Moon's diameter is interpolated to second differences. The differences between the observed and the tabular values of the intervals of transit and of the vertical diameters are exhibited for the purpose of furnishing data for correcting the tabular values of semidiameter.

VI. *Right Ascensions and North Polar Distances of the centres of the Sun, the Moon, the Planets Mercury, Venus, Pallas and Ceres, and De Vico's First Comet, observed in 1844, with the Greenwich Mean Solar Times of transit of centre.* Pages 128—135.

The concluded Right Ascensions and North Polar Distances of the moving bodies are deduced from their apparent R.A. and N.P.D. in the previous part of the work, by applying certain corrections, of which an explanation will now be given.

The only corrections applied to the *apparent Right Ascensions* are those for reducing observations of limbs to observations of centres. It is to be understood that both limbs were observed unless one is mentioned under the head of 'Limb observed,' and that the concluded R.A. of centre is the mean of the apparent R.A. of the Limbs.

When one limb of the *Sun* is observed, the R.A. of centre is inferred from the apparent R.A. of the Limb, by applying the sidereal time occupied by the transit of the semidiameter as given in the Nautical Almanac.

The Right Ascension of the *Moon* at the time of transit of centre is deduced from the observed R.A. of the Limb, by applying the sidereal time occupied by the transit of the semidiameter, taken, first, from the section of Moon-culminating stars in the Nautical Almanac, and then corrected for an error in the Moon's tabular semidiameter of 2",21 in defect. (See Introduction to the volume for 1842, p. xxxviii.) This error is supposed to correspond to the value 15'.30" of the Moon's geocentric semidiameter. Hence the correction added to the tabular interval of transit of semidiameter has to that interval the constant ratio of 2",21 to 15'.30". The amount of correction to be applied in any case is seen at once from the following results calculated by this rule.

Tabular Interval of Transit of Semidiameter.	Correction.
From 61,0 to 65,2	+ 0,15
65,2 — 69,5	+ 0,16
69,5 — 73,7	+ 0,17
above 73,7	+ 0,18.

The R.A. of the centre of *Mercury* are deduced from the observed R.A. by applying the tabular sidereal intervals of transit of semidiameter.

The R.A. of the centre of *Venus* are deduced from the observed R.A. of the Limb, by applying the sidereal intervals of transit of semidiameter taken from the Nautical Almanac and corrected as follows. It appears by the discussion, contained in p. xx of the Introduction to the volume for 1839, of 152 measures of the diameter of Venus, that the semidiameter by measurement is

$$+ 0''.34 + 1.0375 \times \text{Tabular Semidiameter},$$

the first term being probably due to irradiation. Whether this be the case or not the above is the value of the semidiameter, which ought to be used to reduce an observation of the Limb to an observation of the centre. Consequently, the correction to be applied to the tabular sidereal interval of transit of semidiameter is

$$+ 0''.023 + 1.0375 \times \text{Tabular Interval},$$

a mean value of the first term corresponding to the declination 15° being adopted. The amount of correction to be applied in any instance is readily seen from the following calculated results*.

Tabular Interval of Transit of Semidiameter.	Correction.	Tabular Interval of Transit of Semidiameter.	Correction.
From 0.20 to 0.30	+ 0.03	From 1.12 to 1.38	+ 0.07
0.30 — 0.56	+ 0.04	1.38 — 1.66	+ 0.08
0.56 — 0.85	+ 0.05	1.66 — 1.93	+ 0.09
0.85 — 1.12	+ 0.06	1.93 — 2.19	+ 0.10

The R.A. of *Pallas*, *Ceres*, and *De Vico's Comet*, are those immediately given by observation.

The *Geocentric North Polar Distance of Centre* from observation, is deduced from the observed apparent N.P.D., by applying corrections for parallax, for semidiameter when a single Limb is observed, and for the error of assumed colatitude and the discordance of zenith points. In the case of the Sun, the observed apparent N.P.D. of centre is the mean of the observed N.P.D. of the limbs, and in the case of the Moon the observed apparent N.P.D. of the Limb is the mean of the determinations at the several wires.

The parallax is calculated as follows. If r and D be respectively the lines from the centre of the Earth to the place of observation and object observed, z the angle they make with each other, r' the Earth's equatoreal radius, D' the mean distance of the Sun from the Earth, and p the parallax, then the formula used for the Sun's limbs and for the planets is,

$$p = \frac{r}{r'} \times \frac{r'}{D} \times \frac{D'}{D} \times \sin z.$$

$\text{Log } \frac{r}{r'}$ is taken = 9.9990916, which supposes the ratio of the Earth's axes to be that of 297 to 298; $\text{log } \frac{r'}{D} = 0.9333658$, the assumed value of the Sun's equatoreal horizontal parallax at the mean distance being $8''.5776$; $\text{log } \frac{D'}{D}$ is the arithmetical complement of the log. of distance given in the Nautical Almanac; and z is found by subtracting $11'.12''$, the angle of the vertical given by the above ratio of the axes, from the observed zenith distance. When both limbs of the Sun are observed, the parallax of each is calculated for the purpose of correcting the measure of the diameter to what it would be as seen from the Earth's centre, and the mean of the two parallaxes is applied to the apparent N.P.D.

* In the actual calculations the first term of the semidiameter by measurement was taken by mistake equal to $+ 0''.67$ instead of its half $0''.34$, in consequence of which the 'Reductions to Transit of Centre' are too great by $0''.02$ or $0''.03$. See *Errata*.

of centre. For De Vico's Comet $\log \frac{D'}{D}$ was interpolated from Siever's Ephemeris in the *Astronomische Nachrichten*, No. 525, p. 334.

The formula used for computing the parallax of the Moon's limbs is

$$\sin p = \frac{r}{r'} \sin(P + \alpha) \sin z,$$

where P is the equatoreal horizontal parallax, which is first interpolated with second differences from the Nautical Almanac, and then altered in the proportion of $57'.0''.50$ the constant of the Moon's parallax in the Nautical Almanac, to $57'.1''.91$, the constant for the above ratio of the Earth's axes, as deduced by Professor Henderson from observations made at the Cape of Good Hope, and at Greenwich and Cambridge in 1832 and 1833. (Mem. Ast. Society, Vol. x.) The quantity α is a small correction introduced by finding exactly the parallax of the limb, that is, the angle made by a tangent to the highest or lowest point of the Moon's surface, as seen from the place of observation, with a tangent to the highest or lowest point, as seen from the Earth's centre. In using the above formula, the sine is not considered equal to the arc. The other elements of the calculation are the same as for the planets.

For the calculation of α , which is dependent on the zenith distance, I must refer to the *Cambridge Observations*, Vol. iv., for 1831, p. 147. The following is a table of its values, for the North and South Limbs, and for different zenith distances.

Zenith Distance.	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
Corr. for N.L.	- 0,03	- 0,04	- 0,05	- 0,06	- 0,06	- 0,07	- 0,08	- 0,08	- 0,09	- 0,09	- 0,09
Corr. for S.L.	+ 0,10	+ 0,11	+ 0,12	+ 0,12	+ 0,13	+ 0,14	+ 0,15	+ 0,15	+ 0,16	+ 0,16	+ 0,16

When a single Limb of the *Sun* is observed with the Circle, the assumed semidiameter applied to the Geocentric N.P.D. of the Limb, is taken immediately from the Nautical Almanac.

For the *Moon*, the assumed semidiameter is first interpolated to second differences from the Nautical Almanac, and then increased by a quantity which has to the interpolated semidiameter the ratio of $2''.21$ to $15'.30''$. The correction for defect of illumination on March 11 was calculated in the same manner as that already explained for Venus when horned, the Moon on that day being nearly dichotomized. The corrections on May 1 and Nov. 26 were calculated in the same manner as for Venus when gibbous, the ratio of R to r being taken equal to unity. Those of June 29 and Aug. 27 have already been mentioned. In the calculation of all these corrections, as in that for ascertaining whether the S.L. was full on Sept. 19, the Moon's apparent N.P.D. has been made use of.

When both limbs of *Venus* are observed, the half of the 'Diameter by observation' (in p. 126) is applied to the *full* Limb, and as the resulting N.P.D. of centre is considered to be obtained exclusively by observation, the value applied is not put under the head of 'Assumed Semidiameter.' In the cases of observations by single limbs, and for all observations from July 10 to August 6, during which interval the cusps were too sharp for satisfactory bisection, the assumed semidiameter is $0'',34 + 1,0375 \times \text{Tabular Semidiameter}^*$.

In the observations of N.P.D. of all the other bodies the *centres* were bisected.

* By mistake, as mentioned in the previous note, the first term actually employed was $+0'',67$, and the assumed semidiameters are consequently too great by $0'',33$. See *Errata*.

All the observations of N.P.D. of the moving bodies have been corrected for discordance of zenith points and error of assumed colatitude by the Table in page xxxvi.

Transits of known stars were taken from time to time in 1844 with the Circle and the clock Molyneux, for the purpose of ascertaining the error of position of the Circle, the sidereal times of transit across the mean of the wires being obtained by the intervention of comparisons of Molyneux with Hardy. The following are the names and approximate N.P.D. of the Stars employed, with the calculated excesses of the observed times of transit across the mean of the wires above the times of meridian transit.

Transits for the Position of the Circle in 1844.

Day of Observation, 1844.	Star.	Approximate N.P.D.	Interval from meridian to mean of wires.	Day of Observation, 1844.	Star.	Approximate N.P.D.	Interval from meridian to mean of wires.
Jan. 30	α Aquilæ	$81^{\circ} 32'$	+ 0,22	June 1	α Orionis	$82^{\circ} 38'$	+ 0,76
31	α Aquilæ	$81^{\circ} 32'$	+ 0,29	10	Pollux.	$61^{\circ} 36'$	+ 0,92
Feb. 6	Sirius.	$106^{\circ} 30'$	+ 0,47	...	α Serpentis.	$83^{\circ} 5'$	+ 0,65
...	Procyon.	$84^{\circ} 23'$	- 0,02	...	β Lyrae	$56^{\circ} 49'$	+ 0,08
29	α Arietis.	$67^{\circ} 17'$	+ 0,85	...	ζ Aquilæ.	$76^{\circ} 22'$	0,00
Mar. 1	α Andromedæ ...	$61^{\circ} 46'$	+ 0,70	14	Spica	$100^{\circ} 21'$	+ 0,36
5	Pollux.	$61^{\circ} 36'$	+ 1,16	...	Arcturus.	$70^{\circ} 0'$	+ 0,38
9	Procyon.	$84^{\circ} 23'$	+ 0,42	17	Spica.	$100^{\circ} 21'$	+ 0,98
Apr. 3	Aldebaran.	$73^{\circ} 49'$	- 0,59	22	Castor.	$57^{\circ} 47'$	+ 0,26
8	Rigel.	$98^{\circ} 23'$	+ 0,64	...	Procyon.	$84^{\circ} 23'$	+ 0,23
...	β Tauri.	$61^{\circ} 32'$	+ 0,54	...	Pollux.	$61^{\circ} 36'$	+ 0,28
...	α Orionis	$82^{\circ} 38'$	- 0,10	July 11	Arcturus.	$70^{\circ} 0'$	- 0,35
18	α^2 Libræ.	$105^{\circ} 23'$	+ 0,41	20	α Coronæ Borealis	$62^{\circ} 45'$	+ 0,91
29	Rigel.	$98^{\circ} 23'$	+ 0,30	...	α Serpentis.	$83^{\circ} 5'$	+ 0,88
...	β Tauri.	$61^{\circ} 32'$	+ 0,32	...	δ Ophiuchi.	$93^{\circ} 17'$	+ 0,94
May 27	Rigel.	$98^{\circ} 23'$	+ 0,32	22	Regulus.	$77^{\circ} 16'$	+ 0,34
...	Regulus.	$77^{\circ} 16'$	+ 1,00	Aug. 31	β Leonis.	$74^{\circ} 33'$	+ 0,71
...	α Ursæ Majoris...	$27^{\circ} 25'$	- 0,68	Sept. 28	α Aquarii.	$91^{\circ} 5'$	- 0,23
...	δ Leonis.	$68^{\circ} 37'$	+ 0,81	30	γ Aquilæ	$79^{\circ} 46'$	+ 0,84
...	δ Crateris	$103^{\circ} 56'$	+ 0,47	Oct. 10	α Aquilæ	$81^{\circ} 32'$	+ 0,85
...	β Leonis.	$74^{\circ} 33'$	+ 0,46	27	α Arietis.	$67^{\circ} 17'$	+ 0,69
...	Spica	$100^{\circ} 21'$	+ 0,37	Nov. 15	Arcturus.	$70^{\circ} 0'$	+ 0,73
...	Arcturus.	$70^{\circ} 0'$	+ 0,75	20	α Ophiuchi.	$77^{\circ} 19'$	- 0,26
...	ϵ Bootis	$62^{\circ} 16'$	+ 0,29	...	Aldebaran.	$73^{\circ} 49'$	- 0,14
...	α^2 Libræ.	$105^{\circ} 23'$	- 0,84	...	Arcturus.	$70^{\circ} 0'$	+ 0,64
...	β Libræ.	$98^{\circ} 48'$	- 0,25	...	ϵ Bootis	$62^{\circ} 16'$	+ 0,53
...	α Coronæ Borealis	$62^{\circ} 45'$	+ 0,48	...	α Coronæ Borealis	$62^{\circ} 45'$	+ 1,16
...	α Serpentis.	$83^{\circ} 5'$	- 0,19	25	ϵ Bootis	$62^{\circ} 16'$	+ 0,41
...	δ Ophiuchi.	$93^{\circ} 17'$	- 0,56	...	α Coronæ Borealis	$62^{\circ} 45'$	+ 0,37
...	Antares	$116^{\circ} 5'$	- 0,80	26	α Ophiuchi.	$77^{\circ} 19'$	- 0,13
...	α Herculis.	$75^{\circ} 26'$	- 0,88	27	α Herculis.	$75^{\circ} 26'$	- 0,02
...	α Ophiuchi.	$77^{\circ} 19'$	- 0,75	Dec. 4	Arcturus.	$70^{\circ} 0'$	+ 0,09
31	Rigel.	$98^{\circ} 23'$	+ 1,34				

The Circle was taken from the wall on May 27 at 22^h. The above results exhibit discordances which may be partly owing to inaccurate comparisons of the clocks, and probably in some instances to mistakes of integral seconds in the counting. They, however, suffice to shew that the plane of motion of the mean of the wires nearly coincided with the meridian during the whole of the year, and it has, therefore, been thought unnecessary to calculate corrections of the Moon's N.P.D. for error of position of the Circle.

The *Greenwich Mean Solar Time* of transit of Centre, is found by adding to the equivalent, in mean time, of the sidereal time of transit of centre, the next preceding mean time of transit of the first point of Aries, diminished by 23^s,48, as the Cambridge Observatory is 23^s,54 east of the Greenwich Observatory. For greater expedition the *seconds* of the Greenwich Mean Solar Time are generally found by adding together 36^s,52, (= 60^s - 23^s,48), the seconds of the mean time of transit of the first point of Aries, and the seconds of the mean time equivalents, the hours and minutes being extracted from the approximate mean times of meridian passage in the Nautical Almanac.

When a Circle observation is not accompanied by a Transit observation, the Greenwich Mean Solar Time is calculated from the R.A. of centre at meridian transit in the Nautical Almanac, corrected for approximate Tabular error of R.A., and also for the difference of longitude of the Greenwich and Cambridge Observatories by subtracting $0,00654 \times$ the horary variation of R.A. given in that work. As the exact Ephemeris of Pallas in the Nautical Almanac of 1844 does not extend beyond June 9, the R.A. at transit for June 13, 14, and 15, were inferred by carrying on the Ephemeris by differences, the third differences being supposed constant. The Greenwich Mean Solar Time of transit of De Vico's Comet on Sept. 30, was inferred from those on Oct. 2, 3, 5, and 7, by interpolation.

The *seconds of Tabular R.A. and N.P.D.*, from which the *Errors of Tables* are deduced, have been obtained for the Sun and Planets, by subtracting from the R.A. and N.P.D. at meridian transit in the Nautical Almanac, $0,00654 \times$ the horary variations in R.A. and N.P.D.

The seconds of tabular R.A. of the Moon's centre have been derived from the R.A. of the Limb in the Section of Moon-culminating stars in the Nautical Almanac, by applying the sidereal time occupied by the transit of the semidiameter as there given, and subtracting $0,00654 \times$ the variation of R.A. for 1^h of longitude. The seconds of tabular N.P.D. of centre have also been obtained from the Section of Moon-culminating stars, by adding $0,00654 \times$ the variation of declination in 1^h of longitude.

The reduction of the Tabular R.A. and N.P.D. from the Greenwich to the Cambridge transit is facilitated by using the following Table.

Table of corrections for reducing the Tabular R.A. and N.P.D. of the Sun, Moon, and Planets, from the Greenwich to the Cambridge transit.

Var. of Decl. or R.A. in 1^h .	Var. in $23^s,54$ in 1^h .	Var. of Decl. or R.A. in 1^h .	Var. in $23^s,54$ in 1^h .	Var. of Decl. or R.A. in 1^h .	Var. in $23^s,54$ in 1^h .	Var. of Decl. or R.A. in 1^h .	Var. in $23^s,54$ in 1^h .	Var. of Decl. or R.A. in 1^h .	Var. in $23^s,54$ in 1^h .	Var. of Decl. or R.A. in 1^h .	Var. in $23^s,54$ in 1^h .	Var. of Decl. or R.A. in 1^h .	Var. in $23^s,54$ in 1^h .	Var. of Decl. or R.A. in 1^h .	Var. in $23^s,54$ in 1^h .
s. or "	s. or "	s. or "	s. or "	s. or "	s. or "	s. or "	s. or "	s. or "	s. or "	s. or "	s. or "	s. or "	s. or "	s. or "	s. or "
1	0,007	25	0,163	49	0,320	73	0,477	97	0,634	121	0,791	145	0,948	169	1,105
2	0,013	26	0,170	50	0,327	74	0,484	98	0,641	122	0,798	146	0,955	170	1,112
3	0,020	27	0,177	51	0,334	75	0,490	99	0,647	123	0,804	147	0,961	171	1,118
4	0,026	28	0,183	52	0,340	76	0,497	100	0,654	124	0,811	148	0,968	172	1,125
5	0,033	29	0,190	53	0,347	77	0,504	101	0,660	125	0,817	149	0,974	173	1,131
6	0,039	30	0,196	54	0,353	78	0,510	102	0,667	126	0,824	150	0,981	174	1,138
7	0,046	31	0,203	55	0,360	79	0,517	103	0,673	127	0,830	151	0,987	175	1,144
8	0,052	32	0,209	56	0,366	80	0,523	104	0,680	128	0,837	152	0,994	176	1,151
9	0,059	33	0,216	57	0,373	81	0,530	105	0,687	129	0,844	153	1,000	177	1,157
10	0,065	34	0,222	58	0,379	82	0,536	106	0,693	130	0,850	154	1,007	178	1,164
11	0,072	35	0,229	59	0,386	83	0,543	107	0,700	131	0,857	155	1,013	179	1,171
12	0,078	36	0,235	60	0,392	84	0,549	108	0,706	132	0,863	156	1,020	180	1,177
13	0,085	37	0,242	61	0,399	85	0,556	109	0,713	133	0,870	157	1,027	200	1,308
14	0,092	38	0,248	62	0,405	86	0,562	110	0,719	134	0,876	158	1,033	300	1,952
15	0,098	39	0,255	63	0,412	87	0,569	111	0,726	135	0,883	159	1,040	400	2,616
16	0,105	40	0,262	64	0,418	88	0,575	112	0,732	136	0,889	160	1,046	500	3,269
17	0,111	41	0,268	65	0,425	89	0,582	113	0,739	137	0,896	161	1,053	600	3,923
18	0,118	42	0,275	66	0,432	90	0,588	114	0,745	138	0,902	162	1,059	700	4,577
19	0,124	43	0,281	67	0,438	91	0,595	115	0,752	139	0,909	163	1,066	800	5,231
20	0,131	44	0,288	68	0,445	92	0,602	116	0,759	140	0,915	164	1,072	900	5,885
21	0,137	45	0,294	69	0,451	93	0,608	117	0,765	141	0,922	165	1,079	1000	6,539
22	0,144	46	0,301	70	0,458	94	0,615	118	0,772	142	0,929	166	1,085	1100	7,193
23	0,150	47	0,307	71	0,464	95	0,621	119	0,778	143	0,935	167	1,092	1200	7,847
24	0,157	48	0,314	72	0,471	96	0,628	120	0,785	144	0,942	168	1,099	1300	8,501

* * The correction to be applied to the Tabular R.A. has the *opposite* sign to that of the variation of R.A. for one hour in the Nautical Almanac.

The correction to be applied to the Tabular N.P.D. has the *same* sign as that of the variation of declination for one hour in the Nautical Almanac.

The *Determination of the Position of the Ecliptic and of the mean error of the assumed Right Ascensions of the Fundamental Stars from the Transit and Circle Observations of the Sun in 1844*, in pages 136 and 137, has been inserted to give the means of inferring absolute errors of the Solar, Lunar, and Planetary Tables from the observations of this Volume. The calculations have been made on the following principles.

The true longitude λ , and true North Polar Distance Δ , of the Sun's centre, and the true obliquity I , at any instant, are related to each other by the equation,

$$\cos \Delta = \sin \lambda \sin I,$$

and the tabular longitude $\lambda + \delta\lambda$, the tabular North Polar Distance $\Delta + \delta\Delta$, and the assumed obliquity $I + \delta I$, in the Nautical Almanac, for the same instant, by the equation,

$$\cos (\Delta + \delta\Delta) = \sin (\lambda + \delta\lambda) \sin (I + \delta I).$$

Hence neglecting powers of the errors $\delta\lambda$, $\delta\Delta$, δI , above the first,

$$\delta\Delta + \operatorname{cosec} \Delta \cos \lambda \sin I \delta\lambda + \operatorname{cosec} \Delta \sin \lambda \cos I \delta I = 0 \dots\dots\dots (A).$$

Now it is assumed that the changes of λ and I in the course of a year are in accordance with the theoretical calculations, and consequently that their values, as given in the Nautical Almanac, are affected, if by any, by constant errors, which it is proposed to find.

The actual errors of the Solar Tables in N.P.D. cannot be immediately derived from the errors in the columns of pages 128—130, because, though mere errors of observation may be supposed eliminated in the mean result from a large number of observations, there may still remain uncorrected instrumental errors and errors of reduction. Representing therefore by a any error in N.P.D. taken from those columns, and by p the excess of the observed above the true N.P.D., we shall have,

$$\delta\Delta = (\text{Tabular N.P.D.} - \text{observed N.P.D.}) + (\text{observed N.P.D.} - \text{true N.P.D.}) = a + p;$$

and as we are ignorant of the causes to which p may be owing, it is assumed to be constant within the limits of the tropics. The formula used in page 136 is obtained by putting m for $\sin I \delta\lambda$, n for $\cos I \delta I$, and $a + p$ for $\delta\Delta$ in equation (A).

Instead of forming a separate equation from this formula for every different value of a the whole number of observations is divided into twelve groups, the mean of the values of a in each group is considered to correspond to the day nearest the numerical mean of the days of observation in the group, and λ and Δ are taken for the mean noon of the mean day from the Nautical Almanac. In this manner twelve different equations were formed. The rest of the calculation for finding m , n , p , and the mean errors of the Sun's Tabular R.A., the Tabular value of the obliquity, and the assumed R.A. of the fundamental stars, requires no explanation additional to that given in pages 136 and 137.

Occultations of Fixed Stars by the Moon, and Calculation of the Occultations in pages 141—151.

The sidereal times of the occultations were derived from the noted times by the comparisons in page 140, and the Greenwich Mean Solar Times were calculated in the usual manner. For the Calculation of the Occultations, the Geocentric R.A. and N.P.D. of the Moon's centre, the Horizontal Equatoreal Parallax, and the Geocentric Semidiameter, were interpolated for the time of observation with second differences from the Nautical Almanac; and the assumed R.A. and N.P.D. of the stars were taken from the same work. The Moon's apparent R.A., N.P.D., and semidiameter, the apparent distance of the star from the Moon's centre, and the coefficients of small variations, were calculated by the formulæ given in pages xxxiii and xxxiv of Vol. XIII.

The *Hourly Meteorological Observations* at the Solstices and Equinoxes in pages 152—154, were taken in conformity with the notice circulated by Sir J. Herschel in 1835. The Barometer readings have been corrected by $+0^m.100$.

OBSERVATIONS OF 1845.

The general explanation of the printed observations of 1845 being the same as for those of 1844, it will only be necessary to advert here to parts of the calculations, and to circumstances in the observations, which are peculiar to the former year, and to give an account of the constants employed in the reduction of the observations.

I. *Apparent Right Ascensions observed with the Transit.* Pages 156—180.

The intervals of the wires from the mean of all, contained in page ii, were used throughout 1845.

The following were the determinations of collimation error.

March 7, 22 $\frac{1}{2}$ ^h, the Transit was reversed. Before the reversion the cross was obscured by haze, and was a little unsteady. After the reversion, the Sun having shone out, the cross became so unsteady, that it was necessary to defer the bisection till 5 $\frac{1}{2}$ ^h in the afternoon, when it was still very unsteady and obscure. The collimator was shaken by wind, and altogether the circumstances were unfavourable.

Illumination East.

Mean of 6 readings, micrometer-wire coinciding with <i>D</i>	^{r.} 23,872
..... 7 bisecting South mark	22,140
..... 6 bisecting North mark	21,711

Illumination West.

Mean of 7 readings, micrometer-wire bisecting North mark	^{r.} 25,944
..... 8 bisecting South mark	25,318
..... 6 coinciding with <i>D</i>	23,874
Reading for line of collimation by South mark.....	23,729
..... North mark.....	23,827
Reading for true line of collimation	23,778
Reading for coincidence with <i>D</i>	23,873

Hence as the micrometer readings increase in proceeding from the illumination end of the axis, after the reversion *D* was to the *East* of the true line of collimation by 0^o.095. Consequently, the error of collimation of *D*, illumination West, is -1^o.62, one revolution of the micrometer being 17^o.06. The mean of all the wires was more *Westward* than *D* by 1^o.02 (see p. ii.). Hence, taking account of the correction -0^o.18 for diurnal aberration,

Concluded error of collimation, Illumination West, = -1^o.62 + 1^o.02 - 0^o.18 = -0^o.78,
 Illumination East, = +1^o.62 - 1^o.02 - 0^o.18 = +0^o.42.

These determinations are not adopted in the reduction of the transits, but were used, in combination with the following measures taken with the collimating eye-piece, in obtaining new values of the constants $l_w - L_w$ and $l_e - L_e$. (See page ix.)

March 7, just before and after the reversion of the Transit, measures were taken with the collimating eye-piece, which gave the following results.

Illumination East.

Micrometer reading for coincidence with vertical plane	^{r.} 23,867
..... with <i>D</i>	23,873

Illumination West.

Micrometer reading for coincidence with vertical plane	^{r.} 23,756
..... with <i>D</i>	23,873

Hence before the reversion D was to the *West* of the vertical plane by $0''.006$, or $0''.10$, and after the reversion, to the *East* of the vertical plane by $0''.117$, or $2''.00$. Consequently (see p. viii), $a = +2''.00$, $b = -0''.10$, $c = -1''.62$, $l_w = a + c = +0''.38$, $l_e = b - c = +1''.52$. By contemporaneous levellings with the spirit-level, $L_w = -0''.46$ and $L_e = +0''.70$. Hence $l_w - L_w = +0''.84$ and $l_e - L_e = +0''.82$. These values combined with the five determinations of 1844 (p. ix.), give for a mean result, $l_w - L_w = +0''.88$, $l_e - L_e = +0''.71$. Accordingly, the formulæ employed for the adopted values of collimation error in 1845, which in every instance were determined by the collimating eye-piece, are these:

Error of Collimation of the mean of the wires (Illumination West) = $L_w - a + 1''.72$,

Error of Collimation of the mean of the wires (Illumination East) = $L_e - b - 0''.49$.

The following Table exhibits the measures taken in 1845 with the collimating eye-piece, and the resulting values of the collimation error.

Time of Observation, 1845.	Position of Illum. End of Axis.	Micrometer Reading for coincid. with vertical plane.	Micrometer Reading for coincidence with D .	a	b	L_w	L_e	Concluded Error of Collimation.
Mar. 7. 23 ^h	East	23,867	23,873		-0''.10		+0''.70	+0''.31
8. 2	West	23,756	23,873	+2.00		-0.46		-0.74
May 28. 2	West	23,952	23,929	-0.39		-2.96		-0.85
Oct. 9. 4	West	23,945	23,936	-0.15		-2.30		-0.43
9. 5 ¹ / ₂	East	23,805	23,920		-1.96		-1.25	+0.22
1846. Jan. 1. 1	East	23,856	23,877		-0.36		+0.04	-0.09

The micrometer reading for coincidence with the vertical plane is in each instance the mean of two readings, one for the bisection by the micrometer wire of a minute speck on one of the horizontal wires, and the other for the bisection of the same point by the image of the micrometer wire. After the reversion on Oct. 9, the micrometer reading for coincidence with D , obtained when the field was feebly illumined by lamp-light, was found to be $23''.878$. As this was discordant with the reading before reversion, another reading was taken Oct. 9, 22^h, which is that adopted. The values of L_w and L_e are contained in the subjoined Table of Level Errors given immediately by the Spirit Level, the telescope at the time of levelling being horizontal, and its object-glass southward.

Level Errors in 1845.

Time of Levelling.	Level Error.	Position of Illum. End of Axis.	Temperature.	Time of Levelling.	Level Error.	Position of Illum. End of Axis.	Temperature.	Time of Levelling.	Level Error.	Position of Illum. End of Axis.	Temperature.
Jan. 7. 21 ^h	+1.42	East	45	Apr. 21. 7	-1.61	West	54	Sept. 8. 2	-2.41	West	57
13. 2	+1.20	—	43	28. 6 ¹ / ₂	-2.47	—	55	15. 2	-2.70	—	56
20. 2	+0.90	—	42	May 7. 3 ¹ / ₂	-2.73	—	45	23. 2	-2.43	—	53
28. 2	+0.33	—	39	13. 2 ¹ / ₂	-2.63	—	52	29. 2	-2.29	—	55
Feb. 3. 2	+1.14	—	36	19. 2	-2.80	—	49	Oct. 6. 2	-1.72	—	51
11. 2	+0.72	—	32	26. 3	-2.82	—	52	9. 3 ¹ / ₂	-2.30	—	50
17. 2	+1.22	—	37	28. 1	-2.96	—	55	9. 5	-1.25	East	50
24. 2	+0.91	—	38	June 3. 2	-2.05	—	66	13. 3	-0.65	—	56
Mar. 3. 2	+0.60	—	34	9. 2	-2.91	—	60	Nov. 3. 2	-1.04	—	48
7. 22 ¹ / ₂	-0.17	—	35	17. 2 ¹ / ₂	-2.95	—	70	10. 2 ¹ / ₂	+0.04	—	52
7. 23	+0.70	—	36	24. 22	-3.26	—	60	17. 2	+0.23	—	48
8. 1	-0.46	West	36	July 21. 2 ¹ / ₂	-3.26	—	63	26. 2	+0.12	—	49
19. 4	-0.74	—	38	28. 5 ¹ / ₂	-2.96	—	61	Dec. 1. 2	0.00	—	47
24. 2	-0.07	—	47	Aug. 11. 2	-2.87	—	59	8. 2	-0.34	—	40
Apr. 1. 2	-1.61	—	47	18. 2	-2.63	—	58	15. 2	+0.43	—	43
8. 2 ¹ / ₂	-1.89	—	47	25. 2	-2.76	—	65	23. 2	+0.04	—	41
17. 2 ¹ / ₂	-1.55	—	53	Sept. 2. 2 ¹ / ₂	-2.34	—	61	30. 2	+0.40	—	51

The Level Error of Feb. 11 is the result of eight readings, four having been rejected on account of the discordance of one of them. If a discordant reading in the first levelling of March 7 be rejected, the result of eight readings is $+0''.75$. This levelling is not used. The measures of the excess of the radius of the pivot at the illumination end of the axis by the reversions on March 8 and Oct. 9 are $-0''.27$ and $-0''.24$. (See p. xi.)

The observations have all been corrected for the form of the pivots by the Table in page xiii, previous to the calculation of the Azimuth Errors.

Calculation of Azimuth Errors in 1845.

* * See page xiv.

Approximate Mean Time of Observation.	Star.	Seconds of Transit corrected for Collimation and Level Errors.	Seconds of the Star's Assumed R.A.	Correction for rate of Clock.	Excess of Seconds for first Star.	Value of $h'-h$.	Azimuth Error.	Remarks.
Feb. 4. 4 10	Polaris Sirius	35,80 12,84	30,23 21,48	. + 0,22	. + 13,99	+ 1,549	+ 9,03	The azimuth error of Dec. 20, (1844), viz. $+6''.51$ is used on Jan. 1 and Jan. 7. The azimuth error $+10''.03$, used from Jan. 18, is the mean of the four determinations on Feb. 4 and Feb. 5. * By two wires.
9 10	δ Ursæ Min. SP. Sirius	38,95 12,84	54,89 21,48	+ 0,01	- 7,31	- 0,674	+ 10,84	
5. 4 14	Polaris δ Leonis	33,95* 44,47	29,46 53,84	+ 0,40	+ 13,46	+ 1,521	+ 8,85	
9 14	δ Ursæ Min. SP. δ Leonis	37,89 44,47	55,08 53,84	+ 0,19	- 8,01	- 0,702	+ 11,41	
7. 8 9	α Orionis δ Ursæ Min. SP.	37,70 35,61	49,16 55,53	+ 0,02	+ 8,44	+ 0,692	+ 12,20	The azimuth error $10''.87$, used from Feb. 7, is the mean of these two determinations.
8. 8 9	α Orionis δ Ursæ Min. SP.	37,21 37,23	49,15 55,79	+ 0,02	+ 6,60	+ 0,692	+ 9,54	
17. 8 8	α Orionis δ Ursæ Min. SP.	31,56 32,33	49,03 58,15	+ 0,02	+ 8,33	+ 0,692	+ 12,04	
21. 3 5	Polaris α Ceti	6,09 43,92	19,00 12,04	+ 0,04	+ 15,17	+ 1,534	+ 9,89	
Mar. 4. 8 8	δ Ursæ Min. SP. Sirius	17,93 43,87	2,75 21,10	+ 0,01	- 7,60	- 0,674	+ 11,28	
12. 7 7	δ Ursæ Min. SP. 51 (Hev.) Cephei	22,05 35,93	5,51 20,89	0,00	+ 1,50	- 1,540	- 0,97	March 10, 4 ^h , the adjusting screws were turned to diminish the azimuth error.
14. 1 5	Polaris Rigel	28,06 24,03	10,05 6,76	+ 0,13	+ 0,61	+ 1,543	+ 0,40	The mean of these two, viz. $-0''.06$ is used from March 13.
7 7	δ Ursæ Min. SP. 51 (Hev.) Cephei	22,73 35,66	6,35 20,08	0,00	+ 0,80	- 1,540	- 0,52	
20. 1 13 21. 1	Polaris Polaris SP. Polaris	20,29 27,94 20,35			- 7,65 + 7,59	+ 3,074 - 3,074	- 2,48	The means of the observations with and without the micrometer are made use of.
24. 6 6	δ Ursæ Min. SP. 51 (Hev.) Cephei	22,37 23,60	9,91 15,76	0,00	+ 4,62	- 1,540	- 3,00	
26. 1 10	Polaris Regulus	12,88 17,59	7,47 9,41	+ 0,44	- 3,21	+ 1,527	- 2,10	Not used.
28. 0 12 29. 0	Polaris Polaris SP. Polaris	5,12 16,44 5,19*			- 11,32 + 11,25	+ 3,074 - 3,074	- 3,67	* By two wires.
Apr. 1. 0 12 2. 0	Polaris Polaris SP. Polaris	1,21 11,14 3,02			- 9,93 + 8,12	+ 3,074 - 3,074	- 2,94	

Approximate Mean Time of Observation.	Star.	Seconds of Transit corrected for Collimation and Level Errors.	Seconds of the Star's Assumed R.A.	Correction for rate of Clock.	Excess of Seconds for first Star.	Value of $h'-h$.	Azimuth Error.	Remarks.
Apr. 16. 23 17. 3	Polaris β Tauri	49,73 17,20	8,92 31,08	0,17	- 5,48	+ 1,515	- 3,62	
21. 23 22. 11 22. 23	Polaris Polaris SP. Polaris	35,65 37,99 34,27			- 2,34 + 3,72	+ 3,074 - 3,074	- 0,99	
May 13. 21 14. 9	Polaris Polaris SP.	12,96 16,65	20,04 20,28	+ 0,76	- 4,21	+ 3,074	- 1,37	
26. 21 27. 9	Polaris Polaris SP.	6,46 10,70	28,34 59,85	+ 0,76	- 4,71	+ 3,074	- 1,53	Cloudy weather prevented more frequent observations of Polaris.
June 2. 20 3. 3	Polaris Procyon	1,48 42,90	33,40 12,25	+ 0,41	- 2,98	+ 1,533	- 1,94	There was no star sufficiently near the observation of Polaris June 1 to infer an azimuth error.
8. 19 9. 7 9. 19	Polaris Polaris SP. Polaris	57,08 64,92 55,22			- 7,84 + 9,70	+ 3,074 - 3,074	- 2,85	Used to the end of June. The azimuth error at this time appears to have been steady.
July 29. 10 11	δ Ursæ Minoris γ Aquilæ	25,35 1,35	23,22 57,28	+ 0,09	- 2,03	+ 0,679	- 2,99	Suspension of observations during the greater part of July.
31. 10 10	μ^1 Sagittarii δ Ursæ Minoris	35,77 22,59	33,99 22,65	+ 0,02	+ 1,82	- 0,702	- 2,59	
Aug. 4. 9 11	δ Ursæ Minoris α Aquilæ	15,45 13,18	21,52 17,12	+ 0,09	- 2,22	+ 0,681	- 3,26	The mean of these two is used from Aug. 4.
5. 9 9	δ Ursæ Minoris 51(Hev.)Cep.sp.	13,65 1,52	21,24 3,53	0,00	- 5,58	+ 1,540	- 3,60	
8. 9 9	δ Ursæ Minoris 51(Hev.)Cep.sp.	9,84 55,99	20,47 4,60	0,00	- 2,02	+ 1,540	- 1,31	
26. 8 8	δ Ursæ Minoris 51(Hev.)Cep.sp.	40,82 41,68	14,40 12,22	0,00	- 3,04	+ 1,540	- 1,97	
Sept. 8. 7 7	δ Ursæ Minoris 51(Hev.)Cep.sp.	19,73 30,02	9,45 18,51	0,00	- 1,23	+ 1,540	- 0,80	
26. 12 12	β Ceti Polaris	41,52 35,48	52,50 51,49	+ 0,02	+ 5,01	- 1,551	- 3,23	
30. 12 12	β Ceti Polaris	37,12 31,68	52,53 52,02	+ 0,02	+ 4,91	- 1,551	- 3,17	Not used, differing little from the preceding.
Oct. 7. 11 12	β Ceti Polaris	29,04 23,53	52,56 53,52	+ 0,02	+ 6,45	- 1,551	- 4,16	
10. 11 12	β Ceti Polaris	26,30 24,33	52,56 53,59	+ 0,02	+ 2,98	- 1,551	- 1,92	Not used, the next being of greater weight.
13. 11 23 14. 11	Polaris Polaris SP. Polaris	19,51 26,49 17,16			- 6,98 + 9,33	+ 3,074 - 3,074	- 2,65	
31. 10 22 Nov. 1. 10	Polaris Polaris SP. Polaris	57,16 67,23 54,72			- 10,07 + 12,51	+ 3,074 - 3,074	- 3,67	
17. 9 9	β Ceti Polaris	43,12 38,19	52,42 47,32	+ 0,02	- 0,19	- 1,551	+ 0,12	The next is used in preference to this.
20. 9 21. 21 23. 9	Polaris Polaris SP. Polaris	30,53 33,88 26,01			- 3,35 + 7,87	+ 3,074 - 3,074	- 1,82	The clock's rate and change of the star's R.A. are assumed to be uniform in the interval from the first to the third observation.
9 9	β Ceti Polaris	35,82 26,01	52,37 44,28	+ 0,02	+ 1,70	- 1,551	- 1,09	

Approximate Mean Time of Observation.	Star.	Seconds of Transit corrected for Collimation and Level Errors.	Seconds of the Star's Assumed R.A.	Correction for rate of Clock.	Excess of Seconds for first Star.	Value of $h'-h$.	Azimuth Error.	Remarks.
Nov. 25 . 8 11	Polaris α Ceti	24,72 57,74	43,29 15,76	+ 0,06	- 0,61	+ 1,534	- 0,40	
Dec. 1 . 8 20	Polaris Polaris SP.	15,58 24,02	40,51 40,21	+ 0,45	- 9,19	+ 3,074	- 2,99	
8.20 9. 8 9.20	Polaris SP. Polaris Polaris SP.	14,59 2,81 13,53			+ 11,78 - 10,72	- 3,074 + 3,074	- 3,66	
15. 7 8	Polaris α Arietis	52,62 56,59	31,71 31,89	+ 0,03	- 3,82	+ 1,520	- 2,51	
19. 7 8	Polaris α Arietis	44,30 52,11	28,60 31,86	+ 0,03	- 4,58	+ 1,520	- 3,01	The value used, viz. - 2'',07, differs slightly from the mean of these in consequence of a mistake of calculation.
23. 6 7	β Ceti Polaris	8,94 40,64	52,01 25,56	+ 0,02	+ 1,83	- 1,551	- 1,18	
30. 11 31. 23	α Orionis δ Ursæ Minoris	1,82 40,58	52,30 33,74	+ 1,48	+ 1,20	- 0,681	- 1,76	

The assumed apparent R.A. employed in the above calculations are the R.A. of the Nautical Almanac, corrected by the small quantities contained in the subjoined Table of assumed mean R.A., and, in the cases of Polaris, δ Ursæ Minoris, and 51 (Hev.) Cephei, by the small quantities in pages 482 and 483 of Nautical Almanac of 1845, the apparent R.A. of the last named star being first interpolated to second differences.

Assumed Mean R.A. Jan. 1, 1845 of the Fundamental Stars.

Star.	Assumed Mean R.A. Jan. 1, 1845.	Excess above Mean R.A. 1845 of Naut. Alm.	Star.	Assumed Mean R.A. Jan. 1, 1845.	Excess above Mean R.A. 1845 of Naut. Alm.
α Andromedæ..	<i>h. m. s.</i> 0. 0. 23,19	<i>s.</i> 0,00	Arcturus	<i>h. m. s.</i> 14. 8. 35,65	<i>s.</i> + 0,02
β Ceti	0. 35. 48,34	0,00	ϵ Bootis	14. 38. 13,12	+ 0,04
Polaris	1. 3. 34,79	- 0,41	α^2 Libræ	14. 42. 18,84	+ 0,02
α Arietis	1. 58. 26,89	+ 0,04	α Coronæ Bor..	15. 28. 7,65	+ 0,09
α Ceti	2. 54. 10,98	+ 0,03	α Serpentis.	15. 36. 38,26	+ 0,12
Aldebaran	4. 27. 1,99	+ 0,01	δ Ophiuchi.	16. 6. 13,71	+ 0,02
Rigel.	5. 7. 5,49	- 0,02	Antares.....	16. 19. 54,81	+ 0,01
β Tauri.....	5. 16. 29,86	- 0,02	α Herculis....	17. 7. 34,98	+ 0,09
α Orionis	5. 46. 46,92	- 0,02	α Ophiuchi.	17. 27. 44,54	+ 0,09
51 (Hev.) Cephei	6. 25. 59,53	+ 0,05	μ^1 Sagittarii....	18. 4. 29,70	+ 0,01
Sirius	6. 38. 19,22	- 0,02	δ Ursæ Minoris.	18. 22. 19,87	- 0,10
Castor	7. 24. 42,06	- 0,15	β Lyræ.....	18. 44. 21,49	+ 0,01
Procyon.....	7. 31. 11,14	+ 0,05	ζ Aquilæ.....	18. 58. 17,23	+ 0,02
Pollux	7. 35. 49,39	- 0,08	γ Aquilæ	19. 38. 53,44	+ 0,01
ϵ Hydræ	8. 38. 33,93	- 0,03	α Aquilæ	19. 43. 13,23	+ 0,03
α Hydræ	9. 19. 58,26	+ 0,04	β Aquilæ	19. 47. 41,98	+ 0,06
Regulus.....	10. 0. 6,77	- 0,07	α^2 Capricorni...	20. 9. 27,07	+ 0,09
δ Leonis.....	11. 5. 51,41	+ 0,02	β Aquarii	21. 23. 23,75	+ 0,04
β Leonis	11. 41. 9,03	+ 0,03	α Aquarii	21. 57. 49,28	+ 0,04
β Corvi.....	12. 26. 15,35	+ 0,02	α Pegasi.....	22. 57. 2,66	+ 0,05
Spica.....	13. 17. 2,10	+ 0,02			

The above assumed mean R.A. are the mean R.A. resulting from the observations of 1844 by adding the annual variations, unless the number of observations of any star in that year has been less than 20. In that case, if e be the excess of the mean R.A. resulting

from the number n of observations of the star in 1844 above its assumed mean R.A. 1844, the assumed mean R.A. 1845 is derived from that of 1844 by adding the annual variation and the correction $+\frac{ne}{20}$. For those stars of which there were no observations in 1844, the mean R.A., either taken from the Table in p. xix, or obtained by the same rule, are simply increased by the annual variations.

The corrections from the apparent to the mean R.A. in pages 182—191, and the annual variations in pages 192—194, were calculated by the same formulæ as those used in 1844.

II. *Apparent North Polar Distances observed with the Mural Circle.* Pages 196—216.

1845. Aug. 12, 3^h, I observed as follows to determine the value of one revolution of the Circle micrometer. The observations were made by bringing the micrometer wire into contact with a straight horizontal edge at the apex of the spire of Grantchester tower. The spire vibrated considerably during the first two observations, but afterwards became very steady and distinct. The temperature was at 59°·4.

Micro- meter reading.	Pointer reading.	Microscope A	B	C	D	E	F	Correction for Runs.	Concluded Circle reading.	Difference.	Mean of consecutive differences.
- 15	178 . 50	0 . 30,6	27,9	32,0	30,7	33,1	31,4	- 0,3	178 . 50 . 30,90	' "	' "
+ 15	179 . 0	0 . 55,4	53,5	58,4	56,0	58,2	56,6	- 0,6	179 . 0 . 56,25	10 . 25,35	
- 15	178 . 50	0 . 31,8	29,2	33,4	32,3	35,0	32,1	- 0,3	178 . 50 . 32,25	10 . 24,00	10 . 24,68
+ 15	179 . 0	0 . 56,4	55,0	59,6	57,6	59,2	57,5	- 0,6	179 . 0 . 57,45	10 . 25,20	10 . 24,60
- 15	178 . 50	0 . 30,1	28,4	32,6	30,5	33,0	30,9	- 0,3	178 . 50 . 30,87	10 . 26,58	10 . 25,89
+ 15	179 . 0	0 . 54,4	52,1	57,9	55,0	57,3	55,0	- 0,6	179 . 0 . 55,18	10 . 24,31	10 . 25,45
- 15	178 . 50	0 . 29,0	26,8	31,4	29,3	31,5	30,2	- 0,3	178 . 50 . 29,65	10 . 25,53	10 . 24,92
+ 15	179 . 0	0 . 55,0	52,7	58,3	55,2	57,2	55,6	- 0,6	179 . 0 . 55,57	10 . 25,92	10 . 25,73
- 15	178 . 50	0 . 30,2	28,0	32,2	30,4	31,9	30,7	- 0,3	178 . 50 . 30,52	10 . 25,05	10 . 25,49

The correction for Runs found immediately after taking the above measures was - 3",4. The resulting mean value of the micrometer revolution by all the measures is 20",842; by excluding the two first, the result is 20",850, which is adopted.

Observations of Runs in 1845.

Time of Observation, 1845.	Excess of micrometer-reading for negative division above micrometer-reading for positive division, for each microscope.						Corr. for Runs.	Temperature.	Time of Observation, 1845.	Excess of micrometer-reading for negative division above micrometer-reading for positive division, for each microscope.						Corr. for Runs.	Temperature.
	A	B	C	D	E	F				A	B	C	D	E	F		
Jan. 6. ^h	+0,2	+0,4	-1,6	+1,7	+0,6	-1,1	+0,2	37	Aug. 11. ^h	-0,5	0,0	-2,0	+0,1	+0,1	-1,7	-4,0	"
12. 22	+0,4	+1,8	-1,1	+0,8	+0,6	-1,2	+1,3	42	12. 4	+0,2	-0,8	-1,5	+0,9	-0,6	-1,6	-3,4	59
20. 23	+0,8	0,0	-0,8	+1,0	+1,3	-0,5	+1,8	38	6	-0,9	+0,3	-0,4	+0,8	+0,5	-2,0	-1,7	
Feb. 5. 3	0,0	+1,4	-0,2	+1,1	-0,4	+0,2	+2,1	43	18. 3	-1,8	+0,4	-1,0	+0,9	0,0	-1,9	-3,4	63
17. 22	+0,1	-0,1	0,0	+1,2	+0,5	+0,2	+1,9	34	21. 2	-0,9	+0,1	-1,9	+0,4	-0,4	-1,7	-4,4	
23. 22	+1,4	+1,2	-0,3	+2,6	+1,5	+0,3	+6,7	36	27.	0,0	+0,4	-0,7	+1,4	+0,5	-1,5	+0,1	
24. 0	+0,6	+0,4	0,0	+1,4	-0,4	-0,5	+1,5			+0,1	+0,6	-1,5	+0,5	+0,7	-1,1	-0,7	
Mar. 5.	+1,4	+0,4	-0,4	+1,6	+2,1	+0,2	+5,3	23	Sept. 2. 20	-1,0	+0,2	-1,1	+0,2	+0,3	-1,5	-2,9	55
9. 23	+0,1	+0,4	-0,9	+1,6	+1,2	-0,9	+1,5			+0,1	+0,5	-1,4	+0,8	+0,8	-1,5	-0,7	
	+0,9	-0,1	-1,1	+1,2	+0,8	-0,8	+0,9	37	8. 20	-0,5	+0,1	-1,5	+0,7	+0,3	-0,8	-1,7	53
16. 22	+0,3	+0,9	-0,1	+1,1	+1,8	-0,5	+3,5	30	9. 20	-0,2	0,0	-1,8	+0,3	+0,7	-1,5	-2,5	
	+0,4	+2,1	0,0	+1,2	+0,7	-1,8	+2,6		15. 19	+0,7	+0,2	+0,2	+1,1	-0,1	-1,4	+0,7	49
23. 23	+0,7	+1,5	-0,2	+0,5	+1,2	-0,6	+3,1	49		+0,2	0,0	-1,5	+0,5	+0,9	-1,5	-1,4	
	-0,1	+0,9	-1,7	+0,1	+0,2	-1,2	-1,8		22. 19	+0,1	+0,7	-0,6	+0,5	+0,3	-1,2	-0,2	44
31. 13	+0,5	+1,1	-0,4	+1,4	+1,3	-0,3	+3,6	40	23. 3	-1,3	-0,4	-1,2	+0,5	+0,7	-1,6	-3,3	53
	-0,3	+0,3	-1,8	+1,4	+0,5	-0,8	-0,7		28. 20	-0,4	+0,4	-1,4	+1,0	+0,6	+3,3*	+3,5	47
Apr. 10. 23	+0,3	+0,1	-1,2	+1,1	+1,3	-0,8	+0,8	43	30. 14	-0,3	+1,0	-1,4	+1,3	+0,4	-1,7	-0,7	49
14. 8	+0,7	+1,0	-0,9	+1,1	+0,9	-1,2	+1,6		Oct. 7. 14	+0,6	-0,3	-1,7	+0,8	+1,0	-0,6	-0,2	43
16. 5	+0,4	+0,9	-1,4	+2,0	-0,9	-0,8	+0,2	45	8. 6	-0,6	+0,9	-1,1	+1,3	+0,6	-1,8	-0,7	50
	-0,9	+0,1	-0,9	+1,7	+0,4	-0,9	-0,5	49	13. 3	0,0	+0,2	-1,3	+0,6	+0,3	-1,2	-1,4	61
21. 7	-0,5	+0,1	-1,9	+1,1	+0,3	-1,6	-2,5		21	-0,2	-0,3	-1,9	+0,8	+0,6	-1,1	-2,1	51
28. 6	+0,8	+0,2	-0,8	+1,0	+0,5	-1,2	+0,5	55		+0,2	+0,1	-1,2	+0,7	+0,2	-1,3	-1,3	
	+0,2	-0,2	-1,7	0,0	+0,1	-1,6	-3,2		21. 3	+0,4	0,0	-1,5	+0,8	+0,5	-1,6	-1,4	52
May 5. 10	+0,3	+0,9	-1,2	+1,5	+0,5	-1,0	+1,0	43	29. 9	-0,1	+1,0	-1,0	+0,6	+0,1	-1,2	-0,6	48
	0,0	+0,6	-1,3	+0,6	+0,7	-0,3	+0,3		12	+0,6	+0,2	-1,3	0,0	+1,1	-1,8	-1,2	49
10. 12	+0,2	+0,1	-1,8	+0,9	+0,1	-1,3	-1,8	47	Nov. 3. 13	+0,4	+0,1	-1,0	+0,9	+1,1	-0,6	+0,9	41
	-0,1	+0,8	-1,9	+1,0	-0,2	-0,8	-1,2		4. 12	+0,2	+1,2	-0,2	+0,7	+1,8	-0,6	+3,1	40
19. 20	-0,4	+0,3	-1,2	-0,4	-0,1	-0,9	-2,7		10. 12	+0,6	-1,0	-1,2	+0,7	-0,5	-1,2	-2,6	45
26. 10	+0,3	-0,4	-1,1	+1,0	+0,9	-1,5	-0,8	50		-0,7	+0,8	-1,9	+0,9	+0,8	-1,7	-1,8	48
27.	0,0	-0,7	-2,0	+0,9	-0,5	-2,0	-4,3		17. 12	-0,4	+0,7	-0,8	+0,7	+0,2	-1,8	-1,4	42
June 3. 3	-0,6	+0,1	-1,6	+0,5	-0,2	-1,2	-3,0	66		0,0	+0,6	-1,3	+0,4	+1,0	-1,2	-0,5	43
	-0,4	0,0	-2,3	+0,5	-0,3	-0,9	-3,4		25. 10	+0,8	+0,4	-0,5	+0,3	+0,4	-1,0	+0,4	41
July 1. 3	+0,1	+0,3	+0,7	-0,2	+0,1	-1,5	-0,5	66	27. 11	-0,1	+0,6	-1,0	+0,7	+0,5	-1,1	-0,4	47
2. 4	-0,1	0,0	-2,3	+0,1	+0,5	-1,2	-3,0		Dec. 1. 11	+0,1	+1,3	-1,3	+0,8	+0,8	-1,2	+0,5	43
7. 4	-0,3	-0,1	-0,8	+0,6	-0,6	-1,6	-2,8		3. 12	+0,9	+0,9	-1,3	+0,9	+1,0	-1,0	+1,4	36
8. 3	-0,5	+0,1	-2,1	0,0	-1,0	-1,8	-5,3		9. 20	+0,6	0,0	-0,4	-1,3	+0,8	-1,0	+1,3	39
15. 19	0,0	-0,9	-0,1	+0,7	+0,7	-2,0	-1,6	55	16. 19	+0,2	+0,7	-0,9	+0,6	+0,2	-2,2	-1,4	41
	-0,3	+0,6	-1,8	+0,4	+0,2	-1,5	-2,4		21. 19	+0,3	+0,8	-0,9	+0,8	+0,7	-1,1	+0,6	35
26. 7	-0,3	-0,8	-0,9	+1,1	+0,4	-1,8	-2,3	62	23. 11	+0,5	+0,3	-1,0	+0,9	-0,1	-1,4	-0,8	39
	-0,2	-0,7	-1,6	+0,1	+0,2	-0,9	-3,1		30. 6	+0,2	-0,1	-0,3	+1,3	-0,1	-2,1	-1,1	48
Aug. 4. 6	-0,6	-0,8	-1,9	+1,0	0,0	-1,4	-3,7		30. 19	-0,1	+0,4	-1,4	+0,7	+0,8	-1,5	-1,1	42
	-0,7	+1,3	-1,3	-0,1	+0,3	-0,6	-1,1		31. 5	+0,1	+0,4	-0,7	+1,4	+0,4	-0,6	+1,0	44

* This value is discordant, probably through a mistake in reading off the Microscope.

The correction for Runs was ascertained at each determination of the zenith point by the collimating eye-piece, the Telescope being directed to the Nadir, and the value so found is employed in calculating the zenith point. The Runs were also observed, frequently at the same times, after placing the telescope in arbitrary positions, and the adopted correction for Runs is generally the mean of two results, either contemporaneous, or separated by moderate intervals. The brackets in the above Table indicate the values which have been thus combined. The correction for Runs employed on Jan. 1, was obtained on Dec. 29, 1844.

The following were the observations of the micrometer readings for coincidence of the micrometer wire with the fixed wire at the five vertical wires, taking them in the order in which they are passed over by a southern star.

Date of Observation, 1845.	Wire I.	II.	III.	IV.	V.
Jan. 6. 21	10,159	10,184	10,209	10,224	10,242
Feb. 17. 22	10,173	10,193	10,219	10,237	10,256
Mar. 5.	10,187	10,205	10,224	10,233	10,252
Apr. 14. 8	10,174	10,194	10,213	10,230	10,246
May 26. 10	10,169	10,181	10,203	10,220	10,235
June 30. 8	10,156	10,174	10,192	10,208	10,223
July 26. 7	10,150	10,169	10,187	10,200	10,219
Sept. 2. 20	10,159	10,178	10,195	10,212	10,229
Oct. 13. 3	10,159	10,174	10,198	10,210	10,226
Dec. 2. 6	10,174	10,194	10,216	10,226	10,245

The observations at the middle wire only, and times of observation were as follows:

Jan. 12. 22	10,212	May 19. 20	10,204	Oct. 8. 6	10,206
20. 23	10,214	June 3. 3	10,189	20. 3	10,200
Feb. 5. 3	10,215	9. 7	10,189	29. 9	10,208
24. 0	10,216	July 7. 4	10,184	Nov. 4. 12	10,214
Mar. 9. 23	10,213	15. 19	10,200	10. 12	10,213
16. 22	10,217	Aug. 4. 6	10,190	17. 23	10,202
23. 23	10,208	12. 6	10,193	25. 10	10,221
31. 13	10,217	18. 3	10,191	Dec. 9. 19	10,218
Apr. 10. 23	10,207	27.	10,201	16. 19	10,220
21. 7	10,200	Sept. 8. 20	10,202	21. 19	10,222
28. 6	10,199	15. 19	10,203	30. 2	10,206
May 5. 10	10,210	22. 19	10,202	31. 9	10,203
10. 12	10,207	28. 19	10,206		

The adopted zenith point throughout the year 1845 was obtained by the collimating eye-piece, used in the manner explained in page xxxi, the comparison (in page xxxii) of results by this method, and by direct and reflexion observations of stars, appearing to shew that it was worthy of confidence. The observations of stars by reflexion have, however, been continued as usual, for the purpose of obtaining corrections for the discordance of zenith points; and by the application of these corrections the resulting N.P.D. are virtually the same as if they had depended exclusively on the reflexion observations. The chief advantage of the collimating eye-piece is to furnish at once an accurate value of the zenith point, which may be used by itself in the reduction of the observations, instead of adopting the mean result of a large number of reflexion observations. It has been the practice to observe the zenith point generally once a week, and to use the result the third or fourth day previous. The Runs, and micrometer readings for coincidence of the micrometer and fixed wires, were usually taken about the same time. The following is a list of the seconds of all the nadir points observed in the year 1845, with the times of observing them. The degrees and minutes throughout the year were $269^{\circ}.2'$, the telescope not having been moved on the Circle.

Time of Observation.	Seconds of Nadir Point.	Time of Observation.	Seconds of Nadir Point.	Time of Observation.	Seconds of Nadir Point.
Jan. 6. ^h 7 59,73		May 10. 12 60,60		Sept. 15. 20 72,82	
12. 22 60,30		19. 20 61,32		23. 3 73,06	
20. 23 59,00		27. 60,45		30. 14 72,72	
Feb. 19. 23 59,98		June 3. 3 60,20		Oct. 7. 14 73,16	
24. 0 59,52		4. 12 60,88		13. 21 72,33	
Mar. 9. 23 59,15		July 2. 4 61,22		21. 7 72,08	
16. 22 59,85		8. 3 61,38		29. 12 72,27	
23. 23 58,98		15. 19 62,09		Nov. 3. 13 72,61	
31. 13 60,62		26. 7 72,43		12. 12 71,70	
Apr. 1. 3 60,49		Aug. 4. 6 72,09		17. 12 71,86	
10. 23 60,88		11. 6 72,04		27. 11 71,30	
16. 7 59,86		21. 2 72,18		Dec. 3. 12 72,61	
21. 7 59,72		27. 73,19		16. 20 71,29	
28. 7 59,85		Sept. 3. 73,02		22. 20 71,57	
May 5. 10 61,42		9. 20 72,07		30. 19 70,93	

The zenith point used on Jan. 1 was obtained by the collimating eye-piece Dec. 29, 22^h, before the telescope was moved on the Circle. Where two values in the above list are bracketed together, the mean has been adopted. The change of zenith point between July 15 and July 16, was caused by a fresh adjustment of the microscopes on the occasion of taking the Circle from the wall to clean the pivots. It may be remarked that a gradual change of zenith point with the seasons is discernible, analogous to the changes that have been noticed in the Runs and the micrometer coincidence readings.

The corrections from the apparent to the mean N.P.D. in pages 218—228, and the annual variations in pages 229—232, were calculated by the same formulæ as those used in 1844.

Mean Excess for each Star of the adopted Zenith Points above the Zenith Points given by direct and reflexion observations in the year 1845.

* * See page xxxiv.

Star.	Zen. Dist. South.	No. of Obs.	Mean value of M—Z.	Star.	Zen. Dist. South.	No. of Obs.	Mean value of M—Z.
δ Ursæ Minoris SP.	— 41. 11	2	— 0,60	53 Draconis.....	— 4. 23	2	— 0,21
Polaris SP.....	39. 18	4	— 1,47	ε Cephei.....	4. 3	4	+ 0,08
Polaris	36. 16	3	— 0,55	α Cassiopeiæ.....	3. 28	7	+ 0,11
δ Ursæ Minoris.....	34. 23	2	— 0,53	i Persei.....	— 2. 55	13	+ 0,41
γ Cephei.....	24. 33	1	+ 0,16	η Ursæ Majoris.....	+ 2. 8	7	+ 0,09
β Cephei.....	17. 40	1	— 1,07	θ Cygni.....	2. 21	5	+ 0,09
α Camelopardi.....	13. 51	2	— 1,10	α Persei.....	2. 55	8	+ 0,03
α Draconis.....	12. 54	1	— 1,95	χ Ursæ Majoris.....	3. 35	4	— 0,30
α Ursæ Majoris.....	10. 22	2	— 0,61	π ² Cygni.....	3. 37	3	+ 1,10
α Cephei.....	9. 43	6	— 0,27	θ Persei.....	3. 39	12	+ 0,02
1 Lyncis.....	9. 20	2	— 0,60	i Bootis.....	3. 57	1	— 0,89
ο Ursæ Majoris.....	9. 1	5	— 1,43	8 Andromedæ.....	4. 3	7	— 0,20
η Cephei.....	9. 1	3	— 0,99	51 Andromedæ.....	4. 22	3	+ 0,90
ν Cephei.....	8. 12	1	— 0,75	δ Persei.....	4. 56	2	+ 1,11
γ Cassiopeiæ.....	7. 40	1	— 0,09	32 Cygni.....	4. 58	5	+ 0,29
ν Ursæ Majoris.....	7. 33	1	— 2,25	τ Herculis.....	5. 32	1	+ 0,38
ο Draconis.....	6. 59	2	+ 0,44	ι Herculis.....	6. 7	1	+ 1,37
θ Draconis.....	6. 46	3	— 0,91	Capella.....	6. 23	4	+ 0,19
δ Ursæ Majoris.....	5. 41	3	— 0,67	ψ Andromedæ.....	6. 39	5	+ 1,04
B.A.C. 8188.....	5. 29	7	+ 0,34	δ Cygni.....	7. 28	2	+ 0,56
δ Cephei.....	5. 25	1	+ 0,48	α Cygni.....	7. 29	4	+ 0,72
ε Ursæ Majoris.....	— 4. 35	4	— 0,72	ξ Andromedæ.....	7. 30	1	+ 0,29
				λ Ursæ Majoris.....	8. 32	2	+ 0,09
				ε Aurigæ.....	+ 8. 38	2	+ 0,47

Mean Excess for each Star of the adopted Zenith Points above the Zenith Points given by direct and reflexion observations in the year 1845, continued.

Star.	Zen. Dist. South.	No. of Obs.	Mean value of M—Z.	Star.	Zen. Dist. South.	No. of Obs.	Mean value of M—Z.
γ Andromedæ.....	+ 10. 38	1	+ 0,68	α Orionis.....	+ 44. 50	3	- 0,40
η Aurigæ.....	11. 12	1	- 0,19	ϵ Piscium.....	45. 10	2	+ 0,40
ϵ Persei.....	12. 39	2	- 0,11	α Serpentis.....	45. 18	1	- 0,25
α Lyrae.....	13. 34	7	+ 1,09	β Aquilæ.....	46. 11	2	+ 0,57
Castor.....	20. 0	1	- 0,12	ω Piscium.....	46. 13	1	+ 0,41
42 Leonis Minoris..	20. 43	1	- 0,24	Procyon.....	46. 36	5	+ 0,14
				ι Piscium.....	47. 26	1	- 0,92
β Coronæ Borealis..	22. 34	1	- 0,60	α Ceti.....	48. 44	2	+ 1,38
γ Tauri.....	23. 45	1	+ 1,98	γ Ceti.....	49. 38	1	+ 0,36
Pollux.....	23. 49	3	+ 0,21	τ Virginis.....	49. 55	2	- 0,44
α Andromedæ.....	23. 59	6	+ 0,93	ν Leonis.....	52. 11	1	- 0,73
ϵ Bootis.....	24. 29	3	+ 1,10	δ Ceti.....	52. 33	1	+ 2,33
α Coronæ Borealis..	24. 58	1	+ 0,98	α Aquarii.....	53. 17	2	+ 0,22
ϵ Leonis.....	27. 44	1	+ 0,72	η Serpentis.....	55. 9	1	+ 0,82
δ Geminorum.....	29. 57	1	+ 0,86	β Aquarii.....	58. 28	3	+ 1,01
δ Leonis.....	30. 51	1	- 0,14	α Hydræ.....	60. 12	3	+ 0,18
ζ Geminorum.....	31. 25	2	+ 0,10	θ Aquarii.....	60. 46	1	+ 0,58
Arcturus.....	32. 13	4	+ 0,53	β Libræ.....	61. 1	3	+ 0,79
γ Geminorum.....	35. 41	3	+ 0,16	α^2 Capricorni.....	65. 14	4	+ 0,94
Aldebaran.....	36. 1	2	+ 0,60	α^2 Libræ.....	67. 36	1	+ 1,29
α Delphini.....	36. 51	2	+ 0,64	δ Corvi.....	67. 52	2	- 0,25
γ Tauri.....	36. 58	1	- 0,95	Sirius.....	68. 43	3	+ 0,39
α Pegasi.....	37. 50	5	+ 2,35				
ζ Aquilæ.....	38. 35	3	+ 0,49	β Canis Majoris....	70. 6	3	- 0,23
Regulus.....	39. 30	2	+ 0,41	2 Ceti.....	70. 25	1	+ 1,78
α Ophiuchi.....	39. 32	1	+ 0,89	β Ceti.....	71. 3	2	+ 0,98
γ Aquilæ.....	41. 58	1	+ 1,34	π Sagittarii.....	73. 29	1	+ 1,82
β Cancri.....	42. 33	3	- 1,52	τ^5 Eridani.....	+ 74. 22	1	- 0,05
σ Virginis.....	42. 37	1	+ 0,38				
ϵ Pegasi.....	43. 3	2	+ 0,69				
α Aquilæ.....	+ 43. 45	2	+ 1,68				

Corrections for Discordance of Zenith Points and Error of the Assumed Colatitude, to be added to N.P.D. by direct and reflexion observations in 1845.

* * See page xxxvi.

N.P.D.	Correction to direct observation.	Correction to reflexion observation.	N.P.D.	Correction to direct observation.	Correction to reflexion observation.	N.P.D.	Correction to direct observation.	Correction to reflexion observation.
- 10	- 0,46	+ 0,64	35	- 0,17	+ 0,35	80	+ 0,34	- 0,16
- 5	- 0,67	+ 0,85	40	+ 0,33	- 0,15	85	+ 0,21	- 0,03
0	- 0,80	+ 0,98	45	+ 0,68	- 0,50	90	+ 0,38	- 0,20
5	- 0,89	+ 1,07	50	+ 0,84	- 0,66	95	+ 0,59	- 0,41
10	- 0,94	+ 1,12	55	+ 0,89	- 0,71	100	+ 0,70	- 0,52
15	- 0,96	+ 1,14	60	+ 0,90	- 0,72	105	+ 0,76	- 0,58
20	- 0,95	+ 1,13	65	+ 0,85	- 0,67	110	+ 0,79	- 0,61
25	- 0,85	+ 1,03	70	+ 0,76	- 0,58	115	+ 0,82	- 0,64
30	- 0,56	+ 0,74	75	+ 0,61	- 0,43	120	+ 0,83	- 0,65

The correction for error of assumed colatitude included in the above Table is +0",09. On laying down the curve for the construction of this Table, it was found to pass exactly through 0° of zenith distance, as was the case when the adopted zenith point was derived from direct and reflexion observations of stars near the zenith. It may hence be inferred

that the resulting N.P.D. are the same when the collimating eye-piece is made use of, as when determined exclusively by the method of stars. It may also be remarked, that the discordance of zenith points in the above Table, as in those of former years, has a minimum value somewhere about 85° of N.P.D.

Transits for the position of the Circle were occasionally taken in 1845, which shewed that it was nearly adjusted to the meridian. As there were no observations of that year which could be affected in any sensible manner by a small deviation of the instrument from the plane of the meridian, it has been thought unnecessary to give the results of those transits.

Respecting the few observations of moving bodies contained in page 233, it is only necessary to state that the calculated R.A. of Astræa was obtained from M. Galle's Elements given in p. 9 of No. 553 of the *Astronomische Nachrichten*.

The *Occultations* (p. 237) were calculated in the same manner as those of 1844, with the exception that the error (ν) of the assumed Geocentric Colatitude of the Observatory is taken account of, chiefly for the purpose of altering, if required, the assumed ellipticity of the Earth and consequent angle of the vertex, the ratio of the Earth's axes being supposed to be that of 297 to 298. Adopting the notation of the formulæ in pages xxxiii and xxxiv of Vol. XIII, viz. θ = the apparent hour angle of the Moon's centre, θ' = the geocentric hour angle, λ = the apparent N.P.D., λ' = the geocentric N.P.D., $l = 37^\circ.58'.20'',37$, and F = the sine of the horizontal parallax,

$$\text{Coefficient of } \nu \text{ in } \delta R = \sin \theta \operatorname{cosec} \theta' \cot l \sin (\theta - \theta'),$$

$$\text{Coefficient of } \nu \text{ in } \delta \lambda = -F \cdot \frac{\sin \theta}{\sin \theta'} \cdot \frac{\sin \lambda}{\sin \lambda'} \cdot (\cos \lambda \cos l \cos \theta + \sin \lambda \sin l).$$

The *Quarterly Meteorological Observations* were discontinued in 1845.

All the observations in this Volume were originally recorded in pencil writing in small memorandum books, which are carefully preserved for future reference.

APPARENT RIGHT ASCENSIONS

OBSERVED

IN THE YEAR 1844.

RIGHT ASCENSIONS OBSERVED IN THE YEAR 1844.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.				
Jan. 1	α Pegasi	41,3	55,4	9,3	23,2	37,5	51,1	22.57.50	56.23,27	23,37	36,78	-0,21	22.57.01,9	C.			
	α Andromedæ. ...	58,4	13,7	28,9	44,1	59,6	14,6	0.0.30,0	59.44,19	44,30	36,72		0.0.21,11	C.			
	Polaris	27,7	57,4	26,3	55,0	32,4	58,3	1.19.	2.58,13	56,90	36,80			C.			
	(a) α Ceti	52,2	5,8	19,2	33,0	46,4	59,8	2.54.13,2	53.32,81	32,89	36,87		2.54.9,67	C.			
	δ Arietis	25,5	39,8	54,0	8,2	22,9	37,0	3.2.51,2	2.8,37	8,48			3.2.45,26	C.			
	γ Arietis	47,6	2,2	17,0	31,7	46,7	1,3	3.15.16,1	14.31,81	31,91			3.15.8,69	C.			
	) 1 L.	13,8	28,8	43,6	58,4	13,8	28,0	3.34.42,7	33.58,45	58,56			3.34.35,34	C.		
	(b) α^1 Tauri	11,0	25,2	39,5	54,2	9,0	23,3	3.55.37,7	54.54,28	54,39			3.55.31,17	C.			
	ω^2 Tauri	50,2	4,4	18,7	33,1	47,8	1,9	4.8.16,2	7.33,19	33,31			4.8.10,08	C.			
	Aldebaran	42,2	56,1	10,0	24,0	38,2	52,1	4.27.6,2	26.24,11	24,21	36,73		4.27.0,98	C.			
	Rigel	47,2	0,7	14,2	28,0	41,7	55,1	5.7.8,7	6.27,95	28,00	36,87		5.7.4,77	C.			
	(b) B.A.C. 1661.....	38,6	52,2	5,5	19,1	32,7	45,9	5.13.59,6	13.19,09	19,17			5.13.55,93	C.			
(c) B.v. 399	45,2	59,0	12,3	25,8	39,3	53,0	5.17.6,2	16.25,83	25,91			5.17.2,67	C.				
A Orionis.	11,2	24,9	38,4	52,0	5,7	18,9	5.22.32,3	21.51,92	52,01			5.22.28,77	C.				
Jan. 2	Sirius	0,0	14,2	28,3	42,1	56,4	10,2	6.38.24,4	37.42,24	42,27	36,66	-0,19	6.38.18,82	C.			
	Castor	16,7	32,7	48,8	4,5	20,7	36,6	7.24.52,4	24.4,63	4,73	36,44		7.24.41,27	C.			
	Procyon.....	53,2	6,4	20,2	33,5	47,3	0,7	7.31.14,3	30.33,66	33,75	36,69		7.31.10,29	C.			
	Pollux.	26,1	41,3	56,6	12,0	27,4	42,7	7.35.58,1	35.12,04	12,14	36,36		7.35.48,68	C.			
Jan. 5	(d) ζ Geminorum.....	34,1	48,6	2,9	17,3	32,1	46,1	6.55.0,6	54.17,39	17,72		+0,46	6.54.53,99	C.			
	) 2 L.	13,7	28,3	43,0	57,7	12,7	27,2	7.18.41,9	17.57,79	58,12			7.18.34,40	C.		
	Castor	16,8	32,8	48,7	4,6	20,7	36,4	7.24.52,5	24.4,64	4,89	36,32		7.24.41,17	C.			
	Procyon.....	53,0	6,8	20,2	33,7	47,4	0,8	7.31.14,4	30.33,76	34,17	36,31		7.31.10,45	C.			
	Pollux.	26,2	41,3	56,7	12,0	27,5	42,6	7.35.58,1	35.12,06	12,33	36,21		7.35.48,62	C.			
	ζ Cancri. <i>np.</i>	59,1	13,2	27,3	41,5	56,0	9,8	8.3.24,0	2.41,56	41,91			8.3.18,20	C.			
Jan. 6	\odot 1 L.	5,4	19,8	34,5	49,1	3,9	18,5	19.5.33,0	4.49,17	49,66		0,50	19.5.26,28	C.			
	(e) \odot 2 L.	41,4	56,0	10,5	25,4	40,0	19.7.54,6	7.10,67	11,16				19.7.47,78	C.			
	(f) α Aquilæ.	52,2	5,8	33,1	46,9	0,3	19.43.13,9	42.33,09	33,48	36,63				C.			
	Mercury 1 L.....	14,9	29,6	43,8	58,3	13,1	27,5	20.19.42,2	18.58,49	58,97			20.19.35,61	C.			
Jan. 7	(g) α Herculis.....	12,5	26,4	40,0	54,2	8,1	22,0	17.7.35,9	6.54,16	54,61	37,44	0,40		C.			
	α Ophiuchi	22,2	36,1	49,7	3,8	17,4	31,2	17.27.45,0	27.3,64	4,20	37,34			C.			
Jan. 10	\odot 1 L.	32,4	47,0	1,3	16,3	30,7	45,2	19.22.59,8	22.16,10	16,93		0,38	19.22.55,98	C.			
	\odot 2 L.	53,5	8,1	22,5	37,2	51,7	6,3	19.25.21,0	24.37,19	38,02			19.25.16,17	C.			
	α Aquilæ	50,4	4,0	17,6	31,3	45,0	58,6	19.43.12,2	42.31,31	31,89	38,24		19.43.10,04	C.			
	Venus 1 L.....	38,6	53,0	7,0	21,5	35,7	49,8	21.7.4,2	6.21,41	22,20			21.7.0,37	C.			
	Aldebaran	40,1	54,1	8,0	22,3	36,1	50,1	4.27.4,2	26.22,14	22,68	38,23		4.27.0,97	C.			
	(f) Rigel .....	....	....	12,2	26,0	39,4	53,0	5.7.6,6	6.25,83	26,54	38,32		5.7.4,84	C.	
	(f) A Orionis.....	9,3	23,0	....	49,9	3,6	17,0	5.22.30,7	21.49,97	50,56			5.22.28,86	C.		
	α Orionis.	26,5	40,2	53,5	7,6	21,0	34,4	5.46.48,1	46.7,33	7,91	38,26		5.46.46,22	C.			
	(f) δ Ursæ Minoris SP.	3,5	52,8	38,0	24,9	14,7	59,3	6.32.46,0	21.25,68	30,60				C.			
	α Ophiuchi.....	21,1	35,0	48,3	2,5	16,2	30,0	17.27.43,8	27.2,42	2,96	38,64	0,52		C.			
	Jan. 11	\odot 1 L.	53,1	7,7	21,8	36,9	51,3	5,9	19.27.20,5	26.36,75	37,57			19.27.16,24	C.		
		\odot 2 L.	14,0	28,5	42,9	57,6	12,2	26,7	19.29.41,3	28.57,60	58,42			19.29.37,09	C.		
α Aquilæ		50,1	3,7	17,0	31,0	44,6	58,2	19.43.11,7	42.30,91	31,49	38,65			C.			
(h) Mercury 1 L.....		....	....	....	....	48,4	2,5	20.47.17,0	46.34,06	34,86			20.47.13,56	C.
Venus 1 L.....	38,9	53,5	7,6	21,8	35,9	50,2	21.12.4,4	11.21,76	22,55			21.12.1,26	C.				
Jan. 14	(i) δ Ursæ Minoris...	....	....	43,2	33,3	20,4	5,0	18.32.52,6	21.32,26	28,99		0,11		C.	
	β Lyræ .....	....	....	21,6	38,1	54,2	10,1	18.44.26,4	43.37,99	38,40	40,23		18.44.18,54	C.	
Jan. 15	(k) \odot 1 L.	9,9	24,2	38,6	53,5	7,8	22,4	19.44.36,9	43.53,34	54,10			19.44.34,24	C.			
	\odot 2 L.	30,0	44,6	58,9	13,4	28,1	42,5	19.46.57,0	46.13,51	14,27			19.46.54,41	C.			
	Mercury 1 L.	44,7	59,0	12,8	27,2	41,3	55,4	21.3.9,2	2.27,09	27,82			21.3.7,97	C.			
	(l) Venus 1 L.....	27,4	41,7	55,5	9,8	23,8	37,7	21.31.51,9	31.9,69	10,41			21.31.50,56	C.			
	α Andromedæ	54,3	9,6	24,8	40,3	55,6	10,7	0.0.26,2	59.40,22	40,67	40,16		0.0.20,83	C.			
	α Arietis	0,6	15,4	29,7	44,5	59,2	13,6	1.58.28,3	57.44,48	44,95	40,15		1.58.25,12	C.			

ILLUMINATED END OF AXIS EAST. From Jan. 7, WEST. COLLIMATION Error = $-2''$,05. From Jan. 7 = $+1''$,69. LEVEL Error = $+2''$,77. From Jan. 5 = $+2''$,12. From Jan. 7 = $+0''$,82. AZIMUTH Error = $+1''$,52. From Jan. 5 = $+8''$,53. From Jan. 7 = $+9''$,80. From Jan. 14 = $+8''$,95.

(a) Confused. (b) Not good. (c) Quite guess, star so faint. (d) Great rise of Temperature between Jan. 2 and Jan. 5. (e) Clouded at first wire. (f) Cloudy. (g) Faint. (h) Hurried. (i) Fall of Temperature between Jan. 11 and Jan. 14. (k) Not satisfactory. (l) Very unsteady.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Jan. 15	α Ceti.....	48,4	2,0	15,3	28,8	42,5	55,8	2.54.	9,6		53.28,92	29,50	40,12	0,11		2.54.	9,67		G.
	Aldebaran.....	38,2	52,1	6,0	20,4	34,5	48,1	4.27.	2,2		26.20,22	20,73	40,15			4.27.	0,91		G.
	α Aquilæ.....		2,2	15,7	29,4	43,0	56,7	19.43.	10,2		42.29,39	29,93	40,25	0,09					G.
Jan. 16	\odot 1 L.....	28,0	42,4	56,8	11,5	26,0	40,3	19.48.	54,9		48.11,42	12,18				19.48.	52,43		G.
	\odot 2 L.....	47,8	2,4	16,7	31,3	46,0	0,2	19.51.	14,8		50.31,32	32,08				19.51.	12,33		G.
Jan. 17	Venus 1 L.....	14,2	28,3	42,2	56,5	10,6	24,5	21.41.	38,6		40.56,42	57,14				21.41.	37,49		G.
Jan. 18	(a) \odot 1 L.....	1,9	16,2	30,6	45,2	59,7	14,1	19.57.	28,5		56.45,17	45,93		0,16		19.57.	26,21		G.
	\odot 2 L.....	21,4	35,8	50,2	4,8	19,2	33,5	19.59.	48,0		59.4,70	5,46				19.59.	45,74		G.
	Venus 1 L.....	5,6	19,6	33,5	47,5	1,7	15,6	21.46.	29,6		45.47,59	48,30				21.46.	28,59		G.
	α Hydræ.....	36,0	49,7	3,0	16,7	30,4	43,8	9.19.	57,5		19.16,73	17,38	40,33						G.
	Regulus.....	43,8	57,4	11,1	25,1	39,0	52,8	10.0.	6,5		59.25,10	25,60	40,40						G.
Jan. 19	Aldebaran..	37,7	51,8	5,7	19,8	33,8	47,8	4.27.	1,8		26.19,78	20,37	40,48	0,20		4.27.	0,92		G.
	Rigel.....	42,8	56,4	9,8	23,7	37,2	50,8	5.7.	4,2		6.23,57	24,35	40,46			5.7.	4,90		G.
	(b) B.A.C. 1661.....	34,1	47,8	1,1	14,7			5.13.			13.14,67	15,36				5.13.	55,91		G.
	<i>m</i> Orionis. <i>sp.</i>		32,3	45,7	59,5	13,1	26,3	5.14.	40,0		13.59,40	0,99				5.14.	40,64		G.
	A Orionis.....	6,9	20,6	34,1	47,8	1,2	14,8	5.22.	28,2		21.47,66	48,31				5.22.	28,87		G.
	Castor.....	12,3	28,4	44,1	0,3	16,2	32,1	7.24.	48,0		24.0,21	0,68	40,70			7.24.	41,25		G.
	Procyon.....	48,7	2,4	15,8	29,5	42,9	56,5	7.31.	10,0		30.29,40	30,06	40,56			7.31.	10,63		G.
	Pollux.....	21,6	37,0	52,1	7,8	23,0	38,1	7.35.	53,6		35.7,60	8,11	40,61			7.35.	48,68		G.
	α Ophiuchi.....	19,0	33,0	46,5	0,6	14,4	28,1	17.27.	41,8		27.0,49	1,10	40,70	0,19		17.27.	41,75		G.
	α Aquilæ.....	48,1	1,8	15,0	29,0	42,7	56,0	19.43.	9,8		42.28,92	29,56	40,67			19.43.	10,23		G.
	\odot 1 L.....	32,7	47,1	1,3	16,0	30,5	44,7	20.5.	59,2		5.15,93	16,82				20.5.	57,49		G.
	\odot 2 L.....	51,8	6,1	20,4	35,0	49,4	3,8	20.8.	18,2		7.34,96	35,85				20.8.	16,52		G.
	(c) Mercury 1 L.....		10,3		38,3	52,1	6,1	21.10.			9.38,18	39,02				21.10.	19,70		G.
Jan. 20	Venus 1 L.....	44,2	58,0	12,0	26,0	40,0		21.55.			55.25,98	26,81				21.55.	7,49		G.
	α Pegasi.....	36,9	51,0	4,8	18,8	32,8	46,6	22.57.	0,5		56.18,78	19,37	40,63			22.57.	0,06		G.
	γ Andromedæ. <i>sp.</i>	47,6	5,5	23,0	41,5	59,6	17,3	1.54.	35,4		53.41,42	41,80				1.54.	22,52		G.
	B.A.C. 650.....	50,7	4,7	18,6	33,0	47,0	1,1	1.59.	15,2		58.32,91	33,50				1.59.	14,22		G.
	29 Arietis.....	0,7	14,5	28,2	42,3	56,2	10,1	2.24.	24,1		23.42,31	42,91				2.24.	23,63		G.
	μ Arietis.....	12,6	26,8	40,9	55,4	9,7	23,9	2.33.	38,1		32.55,34	55,91				2.33.	36,63		G.
	B.A.C. 845.....	10,5	24,0	37,5	51,2	5,0	18,6	2.36.	32,5		35.51,34	51,99				2.36.	32,71		G.
	α Ceti.....	47,7	1,1	14,6	28,3	41,8	55,1	2.54.	8,7		53.28,19	28,87	40,69			2.54.	9,59		G.
	Aldebaran.....	37,5	51,5	5,5	19,7	33,7	47,6	4.27.	1,7		26.19,60	20,19	40,65			4.27.	0,92		G.
	Rigel.....	42,4	56,0	9,5	23,3	36,9	50,5	5.7.	4,1		6.23,25	24,03	40,78			5.7.	4,77		G.
	(d) B.A.C. 1661.....	34,1	47,4	1,0	14,7	28,0		5.13.			13.14,53	15,22				5.13.	55,96		G.
	<i>m</i> Orionis. <i>sp.</i>			45,5	59,4	12,8	26,0	5.14.	39,5		13.59,15	59,84				5.14.	40,58		G.
	A Orionis.....	6,9	20,4	33,7	47,6	1,0	14,5	5.22.	28,0		21.47,45	48,10				5.22.	28,84		G.
	(e) 125 Tauri.....	40,8	55,8	10,6	25,5	40,6	55,7	5.30.	10,6		29.25,66	26,18				5.30.	6,92		G.
	α Orionis.....	24,1	37,8	51,1	4,9	18,5	31,8	5.46.	45,7		46.4,84	5,48	40,67			5.46.	46,23		G.
	Pollux.....	21,3	36,5	51,9	7,7	22,8	38,0	7.35.	53,2		35.7,35	7,86	40,87			7.35.	48,62		G.
Jan. 21	α Arietis.....	59,8	14,5	28,9	43,8	50,3	13,0	1.58.	27,7		57.43,72	44,26	40,76	0,22					B.
	(f) γ Ceti.....	52,8	6,5	19,9	33,4	47,0	0,5	2.35.	13,8		34.33,42	34,11				2.35.	14,87		G.
	η Tauri.....	50,1	4,8	19,0	34,0	49,1	3,5	3.38.	18,4		37.34,14	34,67				3.38.	15,44		B.
Jan. 22	α Andromedæ.....	53,1	8,5	23,7	39,1	54,5	9,6	0.0.	25,0		59.39,07	39,58	41,16	0,26		0.0.	20,71		G.
	58 Piscium.....	31,6	45,3	58,9	12,8	26,6	40,2	0.38.	54,0		38.12,78	13,40				0.38.	54,54		G.
	<i>i</i> Piscium. <i>np.</i>	5,1	20,1	35,1	50,5	5,4	20,5	0.41.	35,7		40.50,35	50,87				0.41.	32,01		G.
	Piazzi O. 8.....			30,5	44,2	58,1	11,9	0.43.	25,9		42.44,36	44,97				0.43.	26,11		G.
	31 Cassiopeiæ.....		19,1	54,3	31,0	6,8	42,5	1.1.	18,6		59.30,79	30,67				1.0.	11,81		G.
	η Piscium.....	46,5	0,5	14,4	28,4	42,1	56,1	1.23.	10,0		22.28,29	28,89				1.23.	10,04		G.
	105 Piscium.....	54,0	8,1	21,9	36,0	50,0	4,0	1.31.	17,9		30.35,99	36,58				1.31.	17,73		G.
	10 Arietis.....	24,1	39,0	53,9	8,8	23,8	38,4	1.54.	53,3		54.8,76	9,29				1.54.	50,44		G.
	B.A.C. 650.....	50,2	4,4	18,4	32,8	46,8	0,7	1.59.	15,0		58.32,62	33,21				1.59.	14,36		G.
	Σ 274. <i>nf.</i>	8,4	21,9	35,2	49,0	2,4	15,8	2.23.	29,2		22.48,85	49,55				2.23.	30,70		G.
	(g) H.C. 4925.....	8,8	22,8	36,5	50,8	4,8	18,9	2.31.	32,7		30.50,76	51,35				2.31.	32,50		G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",69. LEVEL Error = + 0",82. AZIMUTH Error = + 8",95.
From Jan. 19 = + 10",97.

(a) Clouds passing. (b) Faint from clouds. (c) Very faint. The Circle observation was taken by the same observer: possibly an error of 1^s in excess. (d) Very faint. Considered variable by Taylor. (e) Excessively faint. (f) No correction has been applied for difference of personal equation of B and G, which appears to be small. (g) Estimated to be of the 8th magnitude. A much fainter of greater N.P.D. by 2', preceded about 6'.

RIGHT ASCENSIONS OBSERVED IN THE YEAR 1844.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.			
Jan. 22	μ Arietis.....	12,0	26,3	40,5	55,0	9,1	23,5	2.33.37,8	32.54,89	55,46			0,26	2.33.36,61	G.	
	B.A.C. 845.....	10,0	23,8	37,1	50,9	4,7	18,2	2.36.31,9	35.50,81	51,46				2.36.32,61	G.	
	α Ceti.....	47,2	0,7	14,0	27,9	41,2	54,8	2.54.8,1	53.27,70	28,38	41,16			2.54.9,53	G.	
	Aldebaran.....	37,1	51,1	5,0	19,2	33,2	47,1	4.27.1,1	26.19,12	19,71	41,11			4.27.0,89	G.	
	β Tauri.....	1,1	16,6	31,8	47,1	2,4	17,8	5.16.33,1	15.47,13	47,64	41,20			5.16.28,83	G.	
	A Orionis.....	6,5	19,9	33,2	47,0	0,5	14,0	5.22.27,7	21.46,97	47,62				5.22.28,81	G.	
	δ Ursæ Minoris SP.	1,8	49,2	35,6	22,8	11,4	55,7	6.32.43,0	21.22,79	28,58					G.	
	Pollux.....	21,0	36,3	51,5	7,1	22,4	37,7	7.35.53,0	35.7,00	7,51	41,23			7.35.48,72	G.	
Jan. 23	α Ceti.....	47,0	0,4	13,8	27,4	41,0	54,4	2.54.7,8	53.27,40	28,08	41,44		0,32		G.	
Jan. 24	(a) \odot 1 L.....	24,7	39,1	53,2	7,7	22,1	36,3	20.22.50,4	22.7,65	8,39			0,39	20.22.50,07	G.	
	\odot 2 L.....	43,0	57,2	11,5	26,1	40,2	54,7	20.25.8,9	24.25,94	26,68				20.25.8,36	G.	
	Venus 1 L.....	46,0	59,8	13,7	27,7	41,7	55,3	22.15.9,1	14.27,62	28,30				22.15.10,01	G.	
	) 1 L.....	21,2	35,1	48,8	2,9	16,7	30,4	23.59.44,1	59.2,75	3,32				23.59.45,06	G.
	58 Piscium.....	31,0	44,6	58,1	12,0	26,0	39,6	0.38.53,2	38.12,08	12,61				0.38.54,36	G.	
	(b) i Piscium. np.....	4,4	19,4	34,5	49,6	4,9	20,1	0.41.35,0	49.49,70	50,16				0.41.31,91	G.	
	Procyon.....	47,8	1,2	14,5	28,4	41,9	55,2	7.31.8,8	30.28,26	28,82	41,83			7.31.10,68	G.	
	Pollux.....	20,6	35,9	51,0	6,4	21,8	37,0	7.35.52,2	35.6,42	6,87	41,88			7.35.48,73	G.	
	α Hydræ.....	34,4	48,1	1,5	15,4	28,9	42,5	9.19.56,0	19.15,26	15,91	41,89			9.19.57,80	G.	
	α Aquilæ.....	46,8	0,5	14,0	27,7	41,4	54,8	19.43.8,5	42.27,67	28,21	42,08		0,42		G.	
	Jan. 25	\odot 1 L.....	35,8	50,1	4,2	18,6	33,0	47,4	20.27.1,7	26.18,69	19,43				20.27.1,53	G.
		\odot 2 L.....	53,8	8,1	22,2	36,7	51,1	5,4	20.29.19,6	28.36,70	37,44				20.29.19,54	G.
Jan. 26	\odot 1 L.....	45,8	0,0	14,2	28,6	43,0	57,1	20.31.11,4	30.28,59	29,32			0,32	20.31.11,83	G.	
	\odot 2 L.....	3,7	18,0	32,1	46,6	0,9	15,1	20.33.29,3	32.46,53	47,26				20.33.29,77	G.	
	ϵ Piscium.....	28,2	41,9	55,2	9,1	22,5	36,1	0.54.49,8	54.8,97	9,51				0.54.52,08	G.	
	31 Cassiopeæ.....	41,4	17,5	52,9	29,3	5,4	40,9	1.1.16,9	59.29,19	29,13				1.0.11,70	G.	
	η Piscium.....	44,9	59,0	12,8	26,8	40,7	54,7	1.23.8,4	22.26,76	27,26				1.23.9,83	G.	
	105 Piscium.....	52,8	6,8	20,5	34,6	48,5	2,5	1.31.16,5	30.34,60	35,09				1.31.17,66	G.	
	) 1 L.....	17,1	31,4	45,4	59,8	13,9	28,0	1.33.42,4	32.59,72	0,22				1.33.42,79	G.
	10 Arietis.....	22,4	37,6	52,1	7,4	22,1	37,0	1.54.52,0	54.7,23	7,68				1.54.50,25	G.	
	α Arietis.....	58,0	12,7	27,1	41,9	56,5	11,0	1.58.25,7	57.41,85	42,31	42,63			1.58.24,88	G.	
	θ^1 Arietis.....	3,1	17,5	31,6	46,0	0,4	14,5	2.9.28,8	8.45,99	46,66				2.9.29,05	G.	
	27 Arietis.....	52,0	6,1	19,9	34,4	48,5	2,4	2.22.16,4	21.34,25	34,74				2.22.17,33	G.	
	29 Arietis.....	58,8	12,8	26,4	40,7	54,4	8,2	2.24.22,1	23.40,49	40,99				2.24.23,58	G.	
	μ Arietis.....	10,7	24,9	39,1	53,5	7,8	22,0	2.33.36,3	32.53,48	53,95				2.33.36,54	G.	
	B.A.C. 845.....	8,4	22,2	35,8	49,5	3,2	16,7	2.36.30,4	35.49,46	50,00				2.36.32,59	G.	
	α Ceti.....				26,4	39,8	53,2	2.54.6,6	53.26,23	26,80	42,68			2.54.9,40	G.	
	Aldebaran.....	35,7	49,8	3,7	17,8	31,9	45,8	4.26.59,9	26.17,80	18,29	42,48			4.27.0,91	G.	
	Rigel.....	40,7	54,2	7,7	21,5	35,1	48,5	5.7.2,4	6.21,45	22,10	42,65			5.7.4,73	G.	
	(c) B. v. 294.....	26,8	40,2	53,7	7,3	20,9	34,2	5.12.47,8	12.7,27	7,84				5.12.50,47	G.	
	(d) * N.P.D. 85°.30'.	0,0	13,5	26,9	40,7	53,9	7,5	5.15.21,1	14.40,52	41,08				5.15.23,71	G.	
	(e) * N.P.D. 85°.22'.	4,1	17,5	30,9	44,8	58,1	11,7	5.18.25,1	17.44,60	45,16				5.18.27,79	G.	
	A Orionis.....	5,0	18,6	31,9	45,8	59,1	12,6	5.22.26,1	21.45,59	46,13				5.22.28,76	G.	
	α Orionis.....	22,3	35,9	49,2	2,9	16,6	30,1	5.46.43,8	46.2,98	3,51	42,61			5.46.46,15	G.	
	δ Ursæ Minoris SP.	4,0	50,2	35,8	21,8	12,0	56,6	6.32.42,8	21.23,31	27,79					G.	
	Procyon.....	46,9	0,5	13,8	27,4	41,0	54,4	7.31.8,1	30.27,45	28,00	42,65			7.31.10,66	G.	
	Pollux.....	19,8	35,0	50,1	5,8	21,0	36,2	7.35.51,6	35.5.64	6,07	42,69			7.35.48,73	G.	
Jan. 27	β Arietis.....	36,9	51,4	5,5	20,0	34,4	48,6	1.45.....	45.19,97	20,50			0,30	1.46.3,35	G.	
	(f) B.A.C. 632.....	45,3	59,5	13,4	28,0			1.54.....	54.27,73	28,28				1.55.11,13	G.	
	α Arietis.....	57,7	12,5	26,8	41,7	56,1	10,8	1.58.25,3	57.41,56	42,08	42,85				G.	
	(g)) 1 L.....	55,1	9,8	24,0	38,7	53,1	7,2	2.22.22,0	21.38,56	39,11				2.22.21,97	G.	
Jan. 28	Aldebaran.....	34,8	48,9	2,9	17,1	31,0	45,0	4.26.59,0	26.16,96	17,51	43,24		0,39		G.	
	δ Ursæ Minoris...	13,4	59,8	42,6	32,8	19,8	5,0	18.32.51,0	21.32,06	27,61				18.22.11,08	G.	
	(h) δ Ursæ Minoris M.	34,0	54,0	13,2	32,8	52,1	11,0	18.22.30,1	21.32,46	28,01				18.22.11,48	G.	
Jan. 29	(g) δ Ursæ Minoris SP.	3,0	....	34,2	21,2	....	....	6.21.....	21.22,04	27,65				18.22.11,31	G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",69. LEVEL Error = + 0",82. From Jan. 26 = + 0",59.
 AZIMUTH Error = + 10",97. From Jan. 24 = + 8",95.

(a) Extremely cloudy. (b) The two stars are of equal magnitude. (c) Of the 8th magnitude: no other near. (d) Of the 8th magnitude. (e) Very faint: 9,10 mag. (f) Quite uncertain from clouds. (g) Very cloudy. (h) Taken at intervals of one revolution of the micrometer.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Jan. 29	α Aquilæ.....	45,0	58,7	12,0	26,0	39,4	53,0	19.43. 6,8	42.25,84	26,44	43,92	0,30		G.
Jan. 30	(a) \odot 1 L.....	....	....	..	0,7	14,8	28,9	20.47.43,1	47. 0,57	1,39			20.47.45,40	G.
	\odot 2 L.....	34,9	49,0	3,1	17,5	31,8	45,9	20.50. 0,0	49.17,46	18,28			20.50. 2,29	G.
	α Andromedæ....	50,1	5,6	20,6	36,1	51,4	6,7	0. 0.21,9	59.36,06	36,53	44,12			G.
	β Cassiopeiæ....	40,0	15,8	51,2	27,6	3,7	39,2	1. 1.15,1	59.27,52	27,39			1. 0.11,45	G.
	α Aquilæ.....	44,6	58,4	11,6	25,7	39,1	52,7	19.43. 6,2	42.25,47	26,08	44,30	-0,08	19.43.10,31	G.
Jan. 31	(b) Aldebaran.....	33,9	47,9	1,8	16,0	30,1	44,0	4.26.58,0	26.15,96	16,51	44,21		4.27. 0,72	G.
	(c) B. v. 303.....	43,0	56,2	9,7	23,5	37,0	50,3	5.13. 3,9	12.23,38	24,03			5.13. 8,23	G.
	(d) β Tauri.....	58,1	13,2	28,4	44,2	....	14,7	5.16.30,1	15.44,01	44,49	44,28		5.16.28,69	G.
	ζ Tauri.....	53,7	8,3	22,7	37,4	51,8	6,1	5.28.20,7	27.37,25	37,77			5.28.21,97	G.
	α Orionis.....	20,7	34,1	47,8	1,4	14,9	28,4	5.46.42,1	46. 1,35	1,96	44,14		5.46.46,16	G.
	γ 1 L.....	7,6	22,8	37,6	52,7	7,8	22,6	5.55.37,6	54.52,68	53,20			5.55.37,40	G.
	μ Geminorum....	5,7	20,1	34,7	49,5	4,0	18,6	6.13.33,1	12.49,39	49,91			6.13.34,11	G.
	ϵ Geminorum....	....	8,1	23,0	38,1	53,1	7,8	6.34.22,8	33.38,03	38,54			6.34.22,74	G.
	Procyon.....	45,3	58,8	12,2	26,0	39,4	53,0	7.31. 6,7	30.25,91	26,54	44,13		7.31.10,73	G.
	(e) δ Ursæ Minoris...	12,6	0,4	43,0	32,3	19,6	5,4	18.32.52,2	21.32,21	27,70		-0,22	18.22.11,79	G.
	(e) δ Ursæ Minoris M.	34,8	55,2	14,0	32,3	52,8	11,5	18.22.30,8	21.31,64	27,13			18.22.11,22	G.
	β Lyræ.....	46,0	2,2	18,0	34,4	50,5	6,5	18.44.22,6	43.34,31	34,74	44,18		18.44.18,83	G.
	(f) α Aquilæ.....	44,7	58,4	11,8	25,5	39,1	52,7	19.43. 6,3	42.25,50	26,11	44,28		19.43.10,19	G.
Feb. 1	\odot 1 L.....	29,7	43,9	57,8	12,1	26,2	40,4	20.55.54,6	55.12,11	12,94			20.55.57,01	G.
	\odot 2 L.....	46,0	0,3	14,2	28,6	42,7	56,8	20.58.11,1	57.28,53	29,36			20.58.13,43	G.
	Venus 1 L.....	54,6	8,1	21,6	35,6	49,2	2,9	22.52.16,5	51.35,50	36,25			22.52.20,30	G.
	α Pegasi.....	33,6	47,6	1,4	15,4	29,2	43,1	22.56.57,1	56.15,34	15,90	44,04		22.56.59,95	G.
	27 Arietis.....	50,5	4,6	18,4	32,8	46,8	1,0	2.22.15,1	21.32,75	33,30			2.22.17,32	G.
	29 Arietis.....	57,2	11,1	24,9	39,1	52,9	6,9	2.24.20,6	23.38,96	39,53			2.24.23,55	G.
	H. C. 4925.....	5,8	19,8	33,5	48,1	1,9	15,8	2.31.30,0	30.47,85	48,40			2.31.32,42	G.
	α Ceti.....	44,2	57,8	11,1	24,9	38,4	51,8	2.54. 5,1	53.24,76	25,41	43,99		2.54. 9,43	G.
	(g) B. v. 324.....	29,4	43,0	56,4	10,1	23,7	37,2	5.13.50,6	13.10,06	10,70			5.13.54,69	G.
	(h) B. v. 356.....	....	3,9	17,2	31,1	44,4	57,8	5.15.11,5	14.30,89	31,53			5.15.15,52	G.
	(i) * N.P.D. 85°.22'..	2,3	15,9	29,5	43,0	56,7	10,1	5.18.23,7	17.43,04	43,68			5.18.27,67	G.
	α Orionis.....	21,0	34,6	48,0	1,8	15,5	28,7	5.46.42,4	46. 1,72	2,33	43,76		5.46.46,32	G.
	μ Geminorum....	5,9	20,5	35,1	49,8	4,3	18,8	6.13.33,5	12.49,70	50,22			6.13.34,20	G.
	(k) δ Ursæ Min. SP. M.	24,8	44,0	2,8	21,1	41,0	0,0	6.22.19,6	21.21,91	27,59			18.22.11,57	G.
	ϵ Geminorum....	53,7	8,8	23,4	38,5	53,3	8,0	6.34.23,0	33.38,39	38,70			6.34.22,68	G.
	γ 1 L.....	26,1	41,0	55,7	10,7	25,4	40,1	6.51.55,0	51.10,58	11,10			6.51.55,08	G.
	δ Geminorum....	23,0	37,5	51,7	6,7	21,1	35,7	7.10.50,2	10.6,56	7,08			7.10.51,05	G.
	Procyon.....	45,6	59,1	12,4	26,1	39,8	53,1	7.31. 6,6	30.26,10	26,73	43,94		7.31.10,70	G.
	Feb. 2	α Orionis.....	21,0	34,6	48,1	1,8	15,4	28,9	5.46.42,5	46. 1,76	2,39	43,69	-0,21	5.46.46,10	G.
δ Geminorum....		23,1	37,7	52,0	7,0	21,4	35,9	7.10.50,4	10. 6,79	7,32			7.10.51,02	G.
(l) k Geminorum....		18,5	....	....	0,5	....	28,5	7.24.42,4	24. 0,45	1,02			7.24.44,72	G.
Procyon.....		45,7	59,3	12,6	26,3	39,6	53,3	7.31. 6,9	30.26,24	26,89	43,78		7.31.10,58	G.
Pollux.....		18,8	34,1	49,0	4,7	20,1	35,2	7.35.50,7	35.4,66	5,15	43,63		7.35.48,84	G.
γ 1 L.....		29,2	43,6	58,1	13,0	27,4	41,9	7.47.56,3	47.12,79	13,35			7.47.57,04	G.
ζ Cancri.....		51,7	6,0	19,8	34,3	48,5	2,5	8. 3.16,9	2.34,25	34,31			8. 3.18,50	G.
(l) θ Cancri.....		....	....	....	....	14,5	28,4	8.22.43,0	22. 0,20	0,75			8.22.44,44	G.
δ Ursæ Minoris...		13,4	1,0	44,8	....	21,4	7,2	18.32.53,8	21.33,79	28,64		-0,22	18.22.12,28	G.
β Lyræ.....		46,6	2,8	18,7	35,0	51,1	7,0	18.44.23,1	43.34,90	35,34	43,63		18.44.18,98	G.
α Aquilæ.....	45,3	59,0	12,5	26,2	39,8	53,4	19.43. 7,0	42.26,17	26,80	43,62		19.43.10,43	G.	
Feb. 3	(m) \odot 1 L.....	38,5	52,8	6,6	21,0	35,0	49,1	21. 4. 3,0	3.20,86	21,74			21. 4. 5,36	G.
	\odot 2 L.....	54,6	8,8	22,7	37,0	51,1	5,1	21. 6.19,1	5.36,92	37,80			21. 6.21,42	G.
	Rigel.....	39,4	53,1	6,6	20,4	34,1	47,5	5. 7. 1,3	6.20,35	21,13	43,54		5. 7. 4,67	G.
	B. v. 294.....	....	....	52,6	6,2	19,8	33,2	5.12.46,7	12. 6,20	6,88			5.12.50,42	G.
	(n) * N.P.D. 85°.30'.	59,0	12,4	25,8	39,6	53,0	6,5	5.15.20,0	14.39,48	40,14			5.15.23,68	G.
	(n) * N.P.D. 85°.22'.	3,0	16,5	29,9	43,6	57,0	10,6	5.18.24,1	17.43,54	44,20			5.18.27,74	G.
	(o) δ Ursæ Min. SP. M.	25,2	43,8	3,1	22,0	41,8	0,9	6.22.20,4	21.22,46	28,84			18.22.12,37	G.
	Procyon.....	45,9	59,5	12,9	26,5	40,1	53,6	7.31. 7,1	30.26,52	27,17	43,50		7.31.10,69	G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",69. LEVEL Error = + 0",59. From Feb. 2 = + 0",40. AZIMUTH Error = + 8",95. From Jan. 27 = + 10",48. From α Aquilæ, Jan. 30 = + 10",57. From Feb. 2 = + 11",30.

(a) This Limb clouded at first. (b) Badly defined. The Temperature fell on Jan. 31: the Clock's rate seems affected. (c) Cloudy. No other near. (d) Cloudiness and bad definition. (e) Extremely faint. (f) Very unsteady. (g) Estimated of the 7th mag. (h) Brighter than the preceding: 6,7 mag. The declination in Weisse's Catalogue is 30' too great. (i) Extremely faint: no other near. (k) The coincidence reading taken just before the observation was 10",130: that similarly taken on Jan. 31 was 10",195. (l) Very cloudy. (m) Temp. 35°. (n) Faint. (o) Wires VI. and VII. have each been increased 1" for error of counting detected at the time of observing.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Feb. 3	Pollux.....	18,8	34,1	49,4	5,0	20,2	35,3	7.35.50,7	35.4,79	5,28	43,50	-0,22	7.35.48,80	G.
	(a) ζ Cancr. <i>np</i>	54,9	6,1	20,0	34,4	48,6	2,7	8.3.17,0	2.34,39	34,95			8.3.18,47	G.
	θ Cancr.	17,9	32,1	46,1	0,6	14,8	29,0	8.22.43,2	22.0,53	1,08			8.22.44,59	G.
	ε Hydræ.....	8,6	22,1	35,5	49,4	3,0	16,5	8.38.30,0	37.49,30	49,94	43,56		8.38.33,45	G.
	η 1 L.....	45,0	59,3	13,3	28,0	42,1	56,2	8.43.10,5	42.27,77	28,37			8.43.11,88	G.
	κ Cancr.	55,1	9,0	22,5	36,4	50,0	3,8	8.59.17,5	58.36,33	36,95			8.59.20,46	G.
	α Hydræ.....	32,9	46,5	0,0	13,7	27,2	40,8	9.19.54,5	19.13,66	14,43	43,48		9.19.57,93	G.
	ξ Leonis.....	9,3	23,1	36,8	50,8	4,5	18,1	9.23.32,0	22.50,66	51,27			9.23.34,77	G.
Feb. 4	α Aquilæ.....	45,6	59,5	13,0	26,6	40,4	53,7	19.43.7,4	42.26,60	27,23	43,23	-0,38	19.43.10,30	G.
Feb. 5	⊙ 1 L.....	44,1	58,3	12,0	26,6	40,5	54,6	21.12.8,6	11.26,39	27,25			21.12.10,29	G.
	⊙ 2 L.....	59,8	13,9	27,9	42,1	56,0	10,0	21.14.24,2	13.41,99	42,85			21.14.25,89	G.
	α Pegasi.....	34,5	48,5	2,4	16,5	30,3	44,1	22.56.58,0	56.16,33	16,91	43,01		22.56.59,93	G.
	Venus 1 L.....	7,1	20,7	34,1	48,0	1,5	15,1	23.10.28,6	9.47,87	48,64			23.10.31,65	G.
	10 Arietis.....	22,0	37,0	51,4	6,6	21,6	36,3	1.54.51,3	54.6,60	7,12			1.54.50,09	G.
	(b) B.A.C. 650.....	48,0	2,2	16,3	30,5	44,8	58,7	1.59.12,9	58.30,49	31,06			1.59.14,03	G.
	27 Arietis.....	51,4	5,5	19,4	33,8	47,9	2,0	2.22.16,0	21.33,72	34,29			2.22.17,26	G.
	29 Arietis.....	58,2	12,0	25,9	39,9	53,8	7,6	2.24.21,4	23.39,83	40,43			2.24.23,40	G.
	(c) H.C. 4925.....	6,5	20,8	34,5	48,7	2,5	16,7	2.31.30,7	30.48,63	49,20			2.31.32,17	G.
	Castor.....	10,4	26,2	41,9	58,2	14,0	29,7	7.24.45,8	23.58,03	58,48	42,94		7.24.41,36	G.
	(d) Procyon.....	46,7	0,1	13,6	27,2	40,9	54,2	7.31.7,8	30.27,22	27,87	42,79		7.31.10,75	G.
	Pollux.....	19,6	34,8	50,1	5,5	20,8	36,1	7.35.51,2	35.5,44	5,93	42,84		7.35.48,81	G.
	α Hydræ.....	33,5	47,1	0,7	14,5	27,9	41,5	9.19.55,3	19.14,36	15,13	42,80		9.19.57,98	G.
	π Leonis.....	36,5	50,1	3,4	17,2	31,0	44,5	9.51.58,1	51.17,26	17,90			9.52.0,74	G.
	Regulus.....	41,3	55,4	9,0	23,0	36,7	50,5	10.0.4,1	59.22,87	23,47	42,85		10.0.6,31	G.
	η 2 L.....	2,1	16,1	29,8	43,7	57,6	11,3	10.33.25,1	32.43,68	44,37			10.33.27,20	G.
	δ Leonis.....	8,9	22,3	35,6	49,2	2,9	16,2	10.52.30,0	51.49,30	49,98			10.52.32,81	G.
	(e) φ Leonis.....	21,5	35,9	49,3	3,1	16,7	29,9	11.8.43,3	8.2,82	3,55			11.8.46,37	G.
	α Aquilæ.....	46,1	0,0	13,4	27,2	40,6	54,2	19.43.8,0	42.27,07	27,70	42,78	-0,36	19.43.10,34	G.
Feb. 6	(f) ⊙ 1 L.....	46,0	0,1	14,0	28,1	42,2	56,3	21.16.10,1	15.28,12	28,99			21.16.11,61	G.
	⊙ 2 L.....	1,1	15,2	29,3	43,3	57,3	11,4	21.18.25,5	17.43,31	44,18			21.18.26,80	G.
	Sirius.....	53,5	7,6	21,5	35,8	49,7	3,8	6.38.17,8	37.35,67	36,54	42,37		6.38.19,02	G.
	Castor.....	10,8	26,8	42,5	58,5	14,4	30,2	7.24.46,3	23.58,50	58,95	42,47		7.24.41,42	G.
	Procyon.....	47,0	0,5	13,9	27,7	41,1	54,5	7.31.8,1	30.27,55	28,20	42,46		7.31.10,67	G.
Feb. 7	(g) ⊙ 1 L.....	46,9	1,0	14,8	29,1	43,1	57,0	21.20.11,0	19.28,99	29,77			21.20.12,03	G.
	⊙ 2 L.....	2,1	16,0	29,9	44,1	58,1	12,2	21.22.26,1	21.44,08	44,86			21.22.27,12	G.
	α Aquilæ.....	47,0	0,6	14,0	27,9	41,4	55,0	19.43.8,6	42.27,79	28,37	42,14	-0,18	19.43.10,45	G.
Feb. 8	⊙ 1 L.....	46,6	0,8	14,7	29,0	43,0	56,9	21.24.10,9	23.28,85	29,63			21.24.11,70	G.
	⊙ 2 L.....	1,8	15,8	29,5	43,8	57,9	11,8	21.26.25,8	25.43,78	44,56			21.26.26,63	G.
	α Pegasi.....				17,4	31,2	45,1	22.56.59,1	56.17,32	17,85	42,07		22.56.59,91	G.
	Venus 1 L.....	38,2	51,9	5,3	19,0	32,6	46,1	23.23.59,8	23.18,99	19,67			23.24.1,72	G.
	Rigel.....	41,1	54,8	8,1	21,9	35,6	49,0	5.7.2,6	6.21,88	22,59	42,02		5.7.4,60	G.
	B. v. 324.....	31,4	45,0	58,3	12,0	25,6	39,0	5.13.52,5	13.11,98	12,59			5.13.54,60	G.
	B. v. 356.....		6,0	19,2	33,0	46,5	59,9	5.15.13,5	14.32,92	33,53			5.15.15,54	G.
	* N.P.D. 85°. 22'.	4,5	18,0	31,3	45,0	58,6	12,0	5.18.25,6	17.45,00	45,61			5.18.27,62	G.
	125 Tauri.....	39,4	54,5	9,1	24,4	39,4	54,2	5.30.9,2	29.24,32	24,79			5.30.6,80	G.
	(h) δ Ursæ Min. SP. M.	27,9	47,6	7,0	25,1	44,8	4,2	6.22.23,7	21.26,90	32,40			18.22.14,40	G.
	Procyon.....	47,6	1,1	14,4	28,1	41,7	55,1	7.31.8,7	30.28,10	28,70	41,96		7.31.10,69	G.
	Pollux.....	20,5	35,8	50,9	6,4	21,7	37,0	7.35.52,1	35.6,35	6,80	41,97		7.35.48,79	G.
	(i) δ Ursæ Minoris M.	40,2	59,8	19,0	38,0	56,8	15,4	18.22.34,9	21.36,59	32,57			18.22.14,65	G.
	β Lyræ.....	48,2	4,4	20,2	36,8	52,8	8,9	18.44.25,0	43.36,62	37,06	42,04	-0,04		G.
	α Aquilæ.....	47,0	0,6	14,1	28,0	41,5	55,0	19.43.8,5	42.27,82	28,42	42,11			G.
Feb. 9	⊙ 1 L.....	45,9	0,0	13,8	27,9	41,9	55,9	21.28.10,0	27.27,92	28,71			21.28.10,78	G.
	⊙ 2 L.....	0,6	14,5	28,4	42,5	56,5	10,5	21.30.24,4	29.42,49	43,28			21.30.25,35	G.
Feb. 10	(k) ⊙ 1 L.....	44,1	58,1	12,0	26,1	40,1	....	21.31.	31.26,03	26,82			21.32.8,71	G.
	⊙ 2 L.....	58,5	12,5	26,3	40,5	54,5	8,3	21.34.22,2	33.40,41	41,20			21.34.23,09	G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",69. LEVEL Error = + 0",40. From δ Ursæ Minoris,
Feb. 8 = + 0",81. AZIMUTH Error = + 11",30. From Feb. 7 = + 10",11.

(a) This star was seen elongated. (b) Judged to be of the 7th magnitude. (c) Extremely faint.
(d) Bad definition. (e) Not good: observer fatigued. (f) Much clouded. (g) Misty. (h) Steady and good.
(i) Good. (k) Very cloudy.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.			
Feb. 10	Rigel.....	....	....	....	22,2	35,9	49,2	5. 7. 2,9	6. 22,10	22,83	41,75	-0,12	5. 7. 4,68	G.
	Castor.....	11,1	27,1	43,0	59,1	15,1	31,0	7. 24. 46,8	23. 59,03	59,47	41,94		7. 24. 41,31	G.		
	Procyon.....	47,6	1,1	14,6	28,2	41,9	55,2	7. 31. 8,8	30. 28,20	28,82	41,84		7. 31. 10,66	G.		
	Pollux.....	20,4	36,0	51,0	6,4	21,9	37,0	7. 35. 52,3	35. 6,43	6,91	41,86		7. 35. 48,75	G.		
Feb. 13	(a) ☉ 1 L.....	34,4	48,2	2,0	16,1	30,0	43,9	21. 43. 57,9	43. 16,07	16,85		+0,03	21. 43. 58,50	G.		
	☉ 2 L.....	48,2	2,1	15,9	30,0	43,9	57,6	21. 46. 11,7	45. 29,92	30,70			21. 46. 12,35	G.		
	α Pegasi.....	36,0	50,0	3,7	17,9	31,8	45,7	22. 56. 59,5	56. 17,80	18,35	41,56		22. 57. 0,00	G.		
	(b) Venus 1 L.....	56,0	9,7	23,0	36,9	50,3	3,6	23. 46. 17,2	45. 36,67	37,35			23. 46. 19,00	G.		
	α Andromedæ.....	52,4	7,9	23,0	38,5	53,8	8,9	0. 0. 24,2	59. 38,39	38,87	41,65		0. 0. 20,52	G.		
	α Ceti.....	46,2	59,8	13,1	26,9	40,2	53,7	2. 54. 7,3	53. 26,75	27,39	41,83		2. 54. 9,04	G.		
	Rigel.....	41,3	55,0	8,5	22,3	35,9	49,4	5. 7. 3,0	6. 22,21	22,94	41,59		5. 7. 4,60	G.		
	(c) B. v. 294.....	27,5	41,1	54,3	8,1	21,7	35,1	5. 12. 48,5	12. 8,05	8,69			5. 12. 50,35	G.		
	(d) * N.P.D. 85°. 30'.	0,6	14,1	27,5	41,3	54,9	8,2	5. 15. 21,9	14. 41,22	41,85			5. 15. 23,51	G.		
	(e) * N.P.D. 85°. 22'.	4,9	18,3	31,6	45,4	58,7	12,2	5. 18. 23,9	17. 45,29	45,92			5. 18. 27,58	G.		
	(f) * N.P.D. 83°. 21'.	39,6	53,2	6,6	20,4	34,1	47,4	5. 27. 1,2	26. 20,36	20,97			5. 27. 2,63	G.		
	Regulus.....	42,8	56,8	10,3	24,3	38,1	51,8	10. 0. 5,5	59. 24,23	24,78	41,62		10. 0. 6,44	G.		
Feb. 15	α Aquilæ.....	....	1,0	14,6	28,3	41,9	55,5	19. 43. 9,2	42. 28,27	28,73	41,93	0,20	19. 43. 10,71	G.	
	(g) Mercury 2 L.....	....	....	57,6	12,2	26,5	40,4	20. 13. 54,7	13. 12,05	12,68			20. 13. 54,67	G.
Feb. 16	(h) ☉ 1 L.....	17,6	31,5	45,2	59,3	13,0	27,0	21. 55. 40,8	54. 59,20	59,78			21. 55. 41,78	G.		
	☉ 2 L.....	30,7	44,5	58,2	12,3	26,1	40,1	21. 57. 53,9	57. 12,27	12,85			21. 57. 54,85	G.		
	Venus 1 L.....	12,4	26,1	39,4	53,1	6,7	20,1	23. 59. 33,5	58. 53,05	53,56			23. 59. 35,58	G.		
	Rigel.....	41,0	54,5	8,1	21,9	35,5	49,1	5. 7. 2,6	6. 21,82	22,38	42,10		5. 7. 4,44	G.		
	B. v. 294.....	27,1	40,5	54,0	7,8	21,2	34,7	5. 12. 48,2	12. 7,65	8,14			5. 12. 50,20	G.		
	* N.P.D. 85°. 30'.	0,4	13,9	27,2	41,0	54,5	8,0	5. 15. 21,5	14. 40,92	41,42			5. 15. 23,48	G.		
	* N.P.D. 85°. 22'.	4,3	18,0	31,3	45,1	58,7	12,0	5. 18. 25,5	17. 44,99	45,47			5. 18. 27,53	G.		
	B. v. 623.....	....	46,3	0,0	13,9	27,4	41,0	5. 24. 54,4	24. 13,77	14,24			5. 24. 56,31	G.	
	* N.P.D. 83°. 21'.	39,4	52,9	6,2	20,0	33,7	47,1	5. 27. 0,7	26. 20,01	20,48			5. 27. 2,55	G.		
	B. v. 802.....	57,4	11,0	24,3	38,1	51,9	5,2	5. 31. 18,6	30. 38,07	38,54			5. 31. 20,61	G.		
	α Orionis.....	22,8	36,3	49,7	3,5	17,1	30,6	5. 46. 44,1	46. 3,45	3,91	42,01		5. 46. 45,98	G.		
	(i) δ Ursæ Minoris SP.	10,0	56,8	41,8	28,2	19,2	1,8	6. 32. 49,6	21. 29,63	32,67				G.		
(k) Sirius.....	54,0	8,1	22,0	36,1	50,0	4,1	6. 38. 18,0	37. 36,04	36,65	42,15		6. 38. 18,73	G.			
Feb. 17	(l) ☉ 1 L.....	10,3	24,1	37,6	51,8	5,7	19,2	21. 59. 33,1	58. 51,69	52,26		0,22	21. 59. 34,48	G.		
	☉ 2 L.....	23,1	37,0	50,5	4,7	18,4	32,1	22. 1. 46,0	1. 4,54	5,11			22. 1. 47,33	G.		
	(m) Rigel.....	40,7	54,3	7,9	21,8	5. 6.	6. 21,62	22,18	42,29				G.	
	(m) B. v. 303.....	....	....	11,3	25,1	38,6	52,1	5. 13. 5,5	12. 25,03	25,52			5. 13. 7,81	G.
Feb. 19	(n) Pollux.....	29,0	44,1	59,3	14,9	30,1	45,6	7. 36. 0,9	35. 14,84	15,25	33,47	-4,40	7. 35. 48,68	G.		
	ε Hydræ.....	19,1	32,8	46,1	59,9	13,5	27,1	8. 38. 40,7	37. 59,89	0,38	33,15		8. 38. 33,62	G.		
	(o) Σ 1322. p.....	45,1	59,1	13,1	27,2	41,4	55,3	9. 4. 9,4	3. 27,23	27,69			9. 4. 0,85	G.		
	(p) Σ 1355. np.....	52,6	6,2	19,6	33,2	46,8	0,4	9. 19. 14,1	18. 33,28	33,77			9. 19. 6,89	G.		
	Regulus.....	51,7	5,5	19,1	33,1	46,9	0,5	10. 0. 14,5	59. 33,05	33,51	32,94		10. 0. 6,50	G.		
	(q) Σ 1530. sf.....	38,9	52,3	5,6	19,4	33,1	46,7	11. 12. 0,2	11. 19,46	20,04			11. 11. 52,81	G.		
α Aquilæ.....	56,8	10,4	23,9	37,8	51,4	5,0	19. 43. 18,6	42. 37,70	38,19	32,55	-1,00	19. 43. 10,77	G.			
Feb. 20	☉ 1 L.....	54,8	8,6	22,0	36,0	49,9	3,5	22. 11. 17,2	10. 36,00	36,61			22. 11. 9,09	G.		
	☉ 2 L.....	7,1	20,8	34,4	48,4	2,2	16,0	22. 13. 29,7	12. 48,37	48,98			22. 13. 21,46	G.		
	α Andromedæ.....	1,9	17,1	32,2	47,7	3,0	18,2	0. 0. 33,5	59. 47,66	48,07	32,40		0. 0. 20,47	G.		
	Venus 1 L.....	59,3	12,8	26,2	39,9	53,6	6,9	0. 17. 20,5	16. 39,89	40,43			0. 17. 12,82	G.		
	α Arietis.....	8,0	22,4	37,1	51,9	6,5	21,0	1. 58. 35,6	57. 51,79	52,22	32,36		1. 58. 24,54	G.		
	Aldebaran.....	45,8	59,8	13,6	27,9	41,8	55,9	4. 27. 9,9	26. 27,82	28,28	32,15		4. 27. 0,50	G.		
	B. v. 294.....	37,0	50,3	3,9	17,5	31,0	44,5	5. 12. 58,0	12. 17,46	17,98			5. 12. 50,16	G.		
	* N.P.D. 85°. 30'.	10,1	23,6	37,0	50,7	4,2	17,8	5. 15. 31,3	14. 50,68	51,19			5. 15. 23,37	G.		
	(r) B. v. 623.....	42,7	56,3	9,9	23,4	37,1	50,6	5. 25. 4,1	24. 23,45	23,94			5. 24. 56,12	G.		
	* N.P.D. 83°. 21'.	49,0	2,7	16,3	29,9	43,3	57,0	5. 27. 10,4	26. 29,80	30,29			5. 27. 2,46	G.		
	(e) B. v. 802.....	7,1	20,8	34,1	48,0	1,5	15,1	5. 31. 28,7	30. 47,90	48,39			5. 31. 20,56	G.		
	(e) * N.P.D. 82°. 26'.	20,2	34,0	47,4	1,3	15,0	28,3	5. 34. 41,9	34. 1,16	1,65			5. 34. 33,82	G.		
	α Orionis.....	32,6	46,1	59,4	13,2	26,9	40,4	5. 46. 54,0	46. 13,24	13,73	32,14		5. 46. 45,89	G.		

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = +1",69. LEVEL Error = +0",81. From Feb. 19 = +0",70. AZIMUTH Error = +10",11. From Feb. 15 = +7",24. From Feb. 19 = +7",98.

(a) Very hazy: some wires without the dark glass. (b) Flashing. (c) A small star follows about 16°. (d) Alone. (e) Very faint. (f) Considered of 7,8 magnitude. (g) Extremely faint. (h) Unsteady and badly defined. (i) At last wire faint from clouds. (k) Large disk. (l) Misty. Temp. 41°. (m) Cloudy. (n) Respecting the Clock's rate on Feb. 19 and 20, see the Introduction. (o) Very close: the preceding taken. (p) Magnitudes equal. (q) This observation does not agree with those of 1842. (r) The companion seen.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Feb. 20	δ Ursæ Minoris SP.	20,2	8,0	52,8	38,8	....	....	6.33.	0,0		21.40,17		43,85		-1,00				G.
	Procyon.....	57,3	11,0	24,3	38,0	51,5	5,0	7.31.	18,7		30.37,97		38,47	32,12		7.31.	10,56		G.
	Pollux.....	30,2	45,6	0,8	16,1	31,5	46,9	7.36.	2,1		35.16,17		16,58	32,13		7.35.	48,66		G.
Feb. 22	Rigel.....	51,8	5,5	19,1	32,9	46,6	0,1	5.7.	13,5		6.32,79		33,38	31,01	-0,46	5.7.	4,43		G.
	(a) B.A.C. 1661.....	43,5	57,1	10,4	24,0	37,5	....	5.13.	....		13.23,99		24,52			5.13.	55,57		G.
	m Orionis. sp.....	....	....	55,0	8,8	22,5	35,8	5.14.	49,2		14.8,77		9,30			5.14.	40,35		G.
	B.v. 802.....	8,2	22,0	35,3	49,1	2,8	16,2	5.31.	29,6		30.49,03		49,52			5.31.	20,56		G.
	(b) * N.P.D. 82°. 26'.	20,1	34,0	....	....	....	29,3	5.34.	43,1		34.1,63		2,12			5.34.	33,16		G.
	(c) α Orionis.....	33,7	47,3	0,5	14,2	28,0	41,5	5.46.	55,0		46.14,31		14,80	31,04		5.46.	45,84		G.
	Procyon.....	58,5	12,0	25,4	39,1	52,4	6,0	7.31.	19,7		30.39,02		39,52	31,05		7.31.	10,53		G.
	Pollux.....	31,4	46,6	2,0	17,3	32,7	48,0	7.36.	3,3		35.17,33		17,74	30,95		7.35.	48,74		G.
	Regulus.....	53,6	7,2	21,0	35,2	48,9	2,6	10.0.	16,4		59.34,99		35,45	31,02		10.0.	6,41		G.
	(d) 40 Sextantis.....	13,2	27,1	40,3	54,0	7,3	20,7	10.41.	34,2		40.53,83		54,39			10.41.	25,34		G.
	⊙ 1 L.....	25,0	38,8	52,4	6,2	20,1	3,8	22.22.	47,4		22.6,24		6,84			22.22.	37,56		G.
	⊙ 2 L.....	36,8	50,5	4,1	18,0	31,8	45,4	22.24.	59,1		24.17,96		18,56			22.24.	49,28		G.
	α Aquilæ.....	59,1	12,9	26,2	40,1	53,6	7,3	19.43.	20,9		42.40,02		40,51	30,32	-0,25	19.43.	10,86		G.
Feb. 24	⊙ 1 L.....	47,9	2,6	17,0	31,9	46,4	1,0	2.52.	15,7		51.31,79		32,26			2.52.	2,54		G.
	(e) α Ceti.....	....	11,2	24,5	38,4	52,0	....	2.53.	....		53.38,27		38,79	30,27		2.54.	9,07		G.
	(e) β Tauri.....	11,7	....	42,2	57,8	13,0	28,4	5.16.	43,9		15.57,73		58,14	30,27		5.16.	28,39		G.
	B.v. 925.....	26,5	40,2	53,6	7,4	21,1	34,4	5.35.	48,0		35.7,32		7,81			5.35.	38,06		G.
	B.v. 1015.....	17,6	31,1	44,7	58,4	12,0	25,5	5.39.	39,1		38.58,35		58,84			5.39.	29,09		G.
	(c) Castor.....	....	39,0	54,3	10,7	26,5	42,6	7.24.	58,4		24.10,62		11,00	30,28		7.24.	41,23		G.
	(c) Pollux.....	....	47,3	2,6	18,1	33,4	48,7	7.36.	4,1		35.18,04		18,45	30,22		7.35.	48,68		G.
Feb. 26	(f) ⊙ 1 L.....	48,4	2,1	15,7	29,4	43,1	56,8	22.34.	10,5		33.29,43		29,96		-0,10	22.34.	0,16		G.
	α Andromedæ....	4,0	19,4	34,5	50,0	5,3	20,2	0.0.	35,8		59.49,89		50,26	30,19					G.
	Mercury 2 L.....	10,9	24,9	39,2	53,4	7,6	21,8	20.56.	36,1		55.53,42		54,02		-0,06	20.56.	24,04		G.
Feb. 27	⊙ 1 L.....	34,9	48,6	2,0	15,8	29,6	43,1	22.37.	56,9		37.15,84		16,37			22.37.	46,38		G.
	⊙ 2 L.....	46,0	59,5	13,0	26,9	40,7	54,1	22.40.	7,8		39.26,86		27,39			22.39.	57,40		G.
	Venus 1 L.....	45,4	59,1	12,6	26,3	39,9	53,2	0.48.	6,9		47.26,20		26,66			0.47.	56,67		G.
	(g) β Tauri.....	....	27,5	42,7	58,0	....	....	5.16.	44,0		15.58,06		58,43	29,93		5.16.	28,43		G.
	(e) α Orionis.....	34,4	48,1	1,7	15,4	29,0	42,4	5.46.	56,1		46.15,30		15,74	30,02		5.46.	45,74		G.
	(h) Sirius.....	6,0	20,0	33,8	48,1	2,1	16,1	6.38.	30,1		37.48,03		48,62	30,02		6.38.	18,61		G.
	(e) Castor.....	23,0	39,1	54,9	11,1	26,9	42,7	7.24.	58,5		24.10,89		11,24	30,01		7.24.	41,23		G.
	(e) Procyon.....	59,5	....	....	40,1	53,7	7,1	7.31.	....		30.40,07		40,52	30,00		7.31.	10,51		G.
	Pollux.....	32,4	47,8	2,8	18,4	33,7	49,0	7.36.	4,2		35.18,33		18,70	29,93		7.35.	48,69		G.
	α Aquilæ.....	59,7	13,3	26,7	40,5	54,1	7,7	19.43.	21,4		42.40,49		40,93	29,98	0,02	19.43.	10,89		G.
	(i) Mercury 2 L.....	....	....	....	....	0,7	14,7	21.1.	28,9		0.46,38		46,98			21.1.	16,94		G.
	⊙ 1 L.....	20,9	34,6	48,0	1,9	15,5	29,0	22.41.	42,8		41.1,82		2,35			22.41.	32,31		G.
	⊙ 2 L.....	31,6	45,4	59,0	12,8	26,3	40,0	22.43.	53,5		43.12,67		13,20			22.43.	43,16		G.
	(e) α Andromedæ....	....	....	34,7	50,2	5,2	20,5	0.0.	36,0		59.50,05		50,42	30,02		0.0.	20,38		G.
Feb. 28	Venus 1 L.....	9,0	22,5	36,0	49,7	3,2	16,8	0.52.	30,2		51.49,63		50,09			0.52.	20,05		G.
	(l) ε Hydræ.....	22,1	36,0	49,6	3,1	16,8	30,1	8.38.	44,0		38.3,11		3,56	29,94		8.38.	33,53		G.
	α Cancri.....	42,6	56,6	10,6	24,7	38,7	52,7	8.49.	6,7		48.24,66		25,08			8.48.	55,05		G.
	α Hydræ.....	46,8	10,3	13,9	27,7	41,1	54,8	9.20.	8,3		19.27,56		28,09	29,90		9.19.	58,06		G.
	Regulus.....	54,8	8,4	22,1	36,2	50,0	3,7	10.0.	17,6		59.36,12		36,53	29,95		10.0.	6,50		G.
	⊙ 1 L.....	6,1	19,7	33,0	46,9	0,5	14,0	22.45.	....		44.46,84		47,37		0,30	22.45.	17,49		G.
Feb. 29	⊙ 2 L.....	....	....	43,8	57,7	11,2	24,8	22.47.	38,3		46.57,54		58,07			22.47.	28,19		G.
	Venus 1 L.....	32,2	45,9	59,2	13,0	26,6	40,1	0.56.	53,8		56.12,98		13,43			0.56.	43,58		G.
	α Arietis.....	10,1	24,7	39,1	54,0	8,5	23,1	1.58.	37,8		57.53,91		54,30	30,16					G.
	α Aquilæ.....	59,1	12,9	26,2	40,1	53,7	7,3	19.43.	21,0		42.40,05		40,49	30,47	0,46	19.43.	10,90		G.
	Mercury 2 L.....	9,0	23,2	37,2	51,5	6,0	20,0	21.11.	34,1		10.51,58		52,18			21.11.	22,62		G.
Mar. 1	(n) ⊙ 1 L.....	50,2	4,0	17,4	31,1	44,8	58,5	22.49.	12,0		48.31,15		31,68			22.49.	2,15		G.
	⊙ 2 L.....	1,0	14,4	28,0	41,9	55,5	9,0	22.51.	22,5		50.41,76		42,29			22.51.	12,76		G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",69. LEVEL Error = + 0",70. From Feb. 26 = + 0",64.
 AZIMUTH Error = + 7",98. From Feb. 26 = + 6",99.

(a) Frequently clouded. (b) Excessively faint: clouds passing. (c) Indefinite. (d) The observer thought he saw it double. (e) Cloudy. (f) Much clouded: several wires without the dark glass. (g) Disturbed: very cloudy. (h) Blazing. (i) Not seen earlier. (k) Dark clouds passing. Temp. 40°. (l) Extremely unsteady, and badly defined. (m) Clouds. (n) Some wires without the dark glass.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Mar. 1	α Andromedæ	3,7	19,1	34,0	49,5	4,9	20,1	0.	0.	35,5	59.	49,55	49,92	30,51	0,46	0.	0.	20,41	G.
	Polaris	56,8	29,0	52,4	27,2	58,6	26,8	1.	27.	57,2	2.	26,86	21,46						G.
	Venus 1 L.			22,2	36,0	49,7	3,0	1.	1.	16,6	0.	35,91	36,36			1.	1.	6,87	G.
	Rigel	52,1	5,9	19,3	33,1	46,9	0,2	5.	7.	13,9	6.	33,07	33,60	30,65		5.	7.	4,19	G.
	(a) B. v. 294	38,4	52,0	5,3	19,0	32,4	46,0	5.	12.	59,4	12.	18,93	19,40			5.	12.	49,99	G.
	(a) * N.P.D. 85°. 30'.	11,4	25,1	38,4	52,1	5,7	19,1	5.	15.	32,8	14.	52,04	52,50			5.	15.	23,09	G.
	(a) B. v. 399			17,7	31,1	44,5	58,1	5.	17.	11,6	16.	31,10	31,57			5.	17.	2,16	G.
	B. v. 623	44,2	58,0	11,4	25,1	38,5	52,0	5.	25.	5,7	24.	24,99	25,44			5.	24.	56,03	G.
	* N.P.D. 83°. 33'.			40,1	54,0	7,3	20,9	5.	26.	34,4	25.	53,79	54,24			5.	26.	24,83	G.
	(b) B. v. 802	9,0	22,2	35,8	49,7	3,1		5.	31.	30,0	30.	49,50	49,95			5.	31.	20,55	G.
	B. v. 925	26,0	39,8	53,1	7,0	20,4	34,1	5.	35.	47,8	35.	6,89	7,34			5.	35.	37,94	G.
	B. v. 1015	17,1	30,8	44,1	58,0	11,5	25,1	5.	39.	38,8	38.	57,92	58,36			5.	39.	28,96	G.
	α Orionis	34,0	47,5	1,0	14,7	28,2	41,9	5.	46.	55,3	46.	14,66	15,10	30,61		5.	46.	45,70	G.
	Procyon	58,9	12,4	25,8	39,4	53,1	6,6	7.	31.	20,1	30.	39,48	39,93	30,56		7.	31.	10,56	G.
	(c) Pollux	31,5	47,1	2,1	17,6	33,1	48,4	7.	36.	3,7	35.	17,65	18,02	30,58		7.	35.	48,66	G.
	1 L.	27,6	42,1	56,2	10,8	25,1	39,4	8.	16.	53,9	16.	10,73	11,15			8.	16.	41,80	G.
	(c) δ Cancri	37,9	52,3	6,2	20,7	34,9		8.	35.	10,2	35.	20,62	21,02			8.	35.	51,68	G.
	α^2 Cancri	47,2	1,2	15,0	29,0	42,8	56,5	8.	50.	10,2	49.	28,85	29,27			8.	49.	59,93	G.
	α Hydræ	46,0	59,7	13,1	26,9	40,4	54,0	9.	20.	7,5	19.	26,80	27,33	30,66		9.	19.	58,00	G.
	α Aquilæ	58,8	12,3	25,9	39,7	53,2	6,8	19.	43.	20,4	42.	39,59	40,03	30,95	0,55	19.	43.	10,95	G.
Mar. 2	α Andromedæ.	3,1	18,5	33,6	49,0	4,4	19,7	0.	0.	35,1	59.	49,06	49,43	31,00		0.	0.	20,45	G.
	Venus 1 L.	18,6	32,2	45,5	59,2	13,0	26,5	1.	5.	40,1	4.	59,30	59,75			1.	5.	30,80	G.
	(d) 1 L.	16,0	30,1	43,9	58,4	12,5	26,5	9.	11.	40,6	10.	58,29	58,71			9.	11.	29,94	G.
	α Hydræ	45,4	59,0	12,5	26,2	39,9	53,5	9.	20.	7,0	19.	26,21	26,74	31,24		9.	19.	57,97	G.
	α Leonis	39,2	53,0	6,5	20,5	34,2	47,9	9.	33.	1,5	32.	20,41	20,83			9.	32.	52,07	G.
	π Leonis	48,2	2,0	15,5	29,1	42,9	56,4	9.	52.	10,1	51.	29,18	29,62			9.	52.	0,86	G.
	(c) Regulus	53,3	7,2	21,0	35,0	48,6	2,3	10.	0.	16,3	59.	34,81	35,22	31,27		10.	0.	6,47	G.
Mar. 5	(c) \odot 1 L.	41,8	55,2	8,8	22,7	36,1	49,8	23.	4.	3,3	3.	22,54	23,06		0,50	23.	3.	55,94	G.
	Aldebaran	44,8	58,9	12,6	26,9	41,1	55,0	4.	27.	9,0	26.	26,90	27,31	32,87		4.	27.	0,30	G.
	Rigel	49,9	3,5	17,0	30,8	44,2	57,9	5.	7.	11,5	6.	30,69	31,22	32,96		5.	7.	4,23	G.
	B. v. 303	53,7	7,1	20,6	34,4	47,8		5.	12.		12.	34,22	34,69			5.	13.	7,70	G.
	B. v. 324			7,0	20,6	34,1	47,7	5.	14.	1,2	13.	20,60	21,06			5.	13.	54,07	G.
	B. v. 356		14,5	28,0	41,8	55,3	8,6	5.	15.	22,3	14.	41,66	42,12			5.	15.	15,13	G.
	B. v. 399		1,8	15,2	28,9	42,3	55,7	5.	17.	9,2	16.	28,77	29,24			5.	17.	2,25	G.
	B. v. 623	42,0	55,4	8,9	22,8	36,2	49,8	5.	25.	3,4	24.	22,65	23,09			5.	24.	56,10	G.
	* N.P.D. 83°. 33'.		24,4	37,7	51,5	5,1	18,5	5.	26.	32,0	25.	51,42	51,86			5.	26.	24,87	G.
	(e) B. v. 802	6,3	19,6	33,2	47,0	0,3	14,0	5.	31.	27,7	30.	46,87	47,31			5.	31.	20,32	G.
	(e) B. v. 925	23,8	37,3	50,7	4,5	17,9	31,6	5.	35.	45,0	35.	4,40	4,84			5.	35.	37,86	G.
	B. v. 1015	14,7	28,4	41,9	55,7	9,3	22,9	5.	39.	36,4	38.	55,61	56,05			5.	39.	29,07	G.
	α Orionis	31,2	45,0	58,5	12,1	25,8	39,4	5.	46.	52,8	46.	12,12	12,56	33,08		5.	46.	45,58	G.
	δ Ursæ Minoris SP.	25,2	11,2	57,8	44,4	32,0	17,0	6.	33.	3,2	21.	44,40	47,33						G.
	Sirius	2,7	16,9	30,7	44,9	59,0	12,9	6.	38.	27,1	37.	44,89	45,48	33,05		6.	38.	18,52	G.
	Regulus	51,6	5,2	18,9	32,8	46,9	0,5	10.	0.	14,3	59.	32,89	33,30	33,19		10.	0.	6,41	G.
	ϵ Leonis	9,2	22,9	36,2	49,8	3,2	16,6	11.	22.	30,1	21.	49,72	50,22			11.	22.	23,36	G.
	β Leonis	53,3	7,5	21,2	35,3	49,4	3,1	11.	41.	17,1	40.	35,27	35,68	33,14		11.	41.	8,82	G.
	β Virginis			49,6	3,2	17,0	30,2	11.	42.	43,8	42.	3,28	3,75			11.	42.	36,89	G.
	2 L.	24,1	38,1	51,8	6,0	19,9	33,5	11.	58.	47,6	58.	5,86	6,38			11.	58.	39,53	G.
	γ Virginis	32,0	45,8	59,3	13,0	26,6	40,5	12.	25.	53,9	25.	13,02	13,55			12.	25.	46,71	G.
	(f) Mercury 2 L.					52,1	6,1	21.	38.		37.	38,00	38,59		0,45	21.	38.	11,82	G.
Mar. 6	(g) Rigel	49,2	3,1	16,8	30,5	44,0	57,6	5.	7.	11,0	6.	30,32	30,85	33,31		5.	7.	4,22	G.
	B. v. 303	53,4	7,1	20,4	34,1	47,4	1,0	5.	13.	14,5	12.	33,99	34,46			5.	13.	7,83	G.
	B. v. 356	0,6	14,3	27,6	41,4	54,8	8,4	5.	15.	22,1	14.	41,32	41,78			5.	15.	15,15	G.
	α Hydræ	43,3	56,9	10,2	24,1	37,8	51,2	9.	20.	4,9	19.	24,06	24,58	33,38		9.	19.	58,02	G.
	Regulus	51,0	5,1	18,8	32,5	46,5	0,2	10.	0.	14,0	59.	32,59	33,00	33,48		10.	0.	6,46	G.
	Σ 1530. sf.	38,4	52,1	5,5	19,1	32,7	46,2	11.	11.	59,8	11.	19,12	19,64			11.	11.	53,12	G.
	(h) H. C. 23132	19,3	34,1	49,1	4,2	19,1	33,8	12.	13.	49,1	13.	4,11	4,49			12.	13.	37,99	G.
	γ Virginis	31,9	45,6	59,1	13,0	26,6	40,1	12.	25.	53,9	25.	12,89	13,42			12.	25.	46,92	G.
	ψ Virginis	2,7	16,2	29,6	43,4	57,1	10,8	12.	46.	24,2	45.	43,44	43,97			12.	46.	17,48	G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",69. LEVEL Error = + 0",64. From α Aquilæ March 1 = + 0",65. AZIMUTH Error = + 6",99. From March 5 = + 6",92.

(a) Faint from haze. (b) Uncertain on account of the faintness of the object. (c) Cloudy. (d) The observer was disturbed. (e) Faint. (f) Clouds prevented more wires being taken. (g) The counting being found 1" in advance, the last four wires have been diminished 1". (h) The R.A. of this star in Lalande's Catalogue is 30" in defect.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.			
Mar. 6	(a) γ 2 L.....	35,4	49,9	3,8	18,1	32,2	46,2	12.56. 0,3	55.17,99	18,53		0,45	12.55.52,04	G.		
	(b) Spica.....	46,4	....	13,5	27,5	41,3	55,0	13.17. 8,8	16.27,53	28,07	33,63		13.17. 1,59	G.	
Mar. 7	\odot 1 L.	5,0	18,4	32,0	45,9	59,3	12,8	23.11.26,2	10.45,66	46,16			23.11.19,87	G.		
	\odot 2 L.	14,8	28,2	41,8	55,5	9,0	22,6	23.13.36,1	12.55,43	55,93			23.13.29,64	G.		
	Mercury 2 L.	9,3	23,4	37,1	51,2	5,3	19,1	21.49.33,2	48.51,23	51,81		0,59	21.49.26,21	G.		
Mar. 8	\odot 1 L.	46,1	59,8	13,1	26,8	40,3	53,8	23.15. 7,3	14.26,74	27,24			23.15. 1,67	G.		
	\odot 2 L.	56,1	9,4	22,8	36,6	50,1	3,5	23.17.17,1	16.36,52	37,02			23.17.11,45	G.		
Mar. 9	(b) \odot 1 L.	26,6	40,1	53,6	7,2	20,9	34,4	23.18.48,0	18. 7,26	7,85		0,82	23.18.42,75	G.		
	\odot 2 L.	36,1	49,8	3,1	16,8	30,2	44,0	23.20.57,4	20.16,77	17,36			23.20.52,26	G.		
	Rigel.....	47,5	1,1	14,6	28,4	42,1	55,5	5. 7. 9,2	6.28,35	28,98	35,13		5. 7. 4,07	G.		
	B. v. 303.....	51,5	5,0	18,3	32,1	45,6	59,1	5.13.12,5	12.32,02	32,56			5.13. 7,66	G.		
	* N.P.D. 83°.33'	8,4	22,0	35,4	49,1	2,7	16,1	5.26.29,7	25.49,06	49,57			5.26.24,67	G.		
	B. v. 1015.	12,2	26,0	39,4	53,2	7,0	20,4	5.39.34,0	38.53,18	53,68			5.39.28,79	G.		
	α Orionis.....	29,2	42,9	56,2	10,1	23,8	37,1	5.46.50,9	46.10,03	10,53	35,04		5.46.45,65	G.		
	B. v. 1359.	30,2	44,1	57,5	11,3	25,0	38,3	5.52.52,1	52.11,22	11,72			5.52.46,84	G.		
	Castor.....	17,8	33,8	49,4	5,7	21,3	37,2	7.24.53,2	24. 5,49	5,86	35,23		7.24.41,03	G.		
	Procyon.....	54,1	7,6	21,0	34,8	48,1	1,8	7.31.15,1	30.34,64	35,16	35,23		7.31.10,34	G.		
	Pollux.	27,1	42,4	57,5	13,0	28,2	43,5	7.35.58,9	35.12,95	13,36	35,12		7.35.48,54	G.		
Mar. 11	α Orionis.....	27,2	40,9	54,2	8,0	21,5	35,1	5.46.48,9	46. 7,97	8,47	37,07	0,75		G.		
	B. v. 1359.	28,4	42,0	55,5	9,2	23,0	36,6	5.52.50,1	52. 9,26	9,76			5.52.46,85	G.		
	δ Ursæ Minoris SP. ....	....	....	....	41,4	31,2	....	6.33. 2,8	21.42,74	47,04			18.22.24,15	G.
	(c) Sirius.....	58,4	12,6	26,1	40,9	54,6	8,7	6.38.22,9	37.40,61	41,30	37,12			G.		
	γ 2 L.....	32,8	48,0	3,1	18,1	33,2	48,5	18. 6. 3,5	5.18,17	18,90		0,67	18. 5.56,40	G.		
	δ Ursæ Minoris...	29,8	17,2	0,0	50,8	37,0	22,1	18.33.10,6	21.49,64	46,29			18.22.23,79	G.		
	α Aquilæ.....	52,4	6,0	19,6	33,3	47,0	0,5	19.43.14,1	42.33,28	33,78	37,44		19.43.11,32	G.		
Mar. 12	(d) \odot 1 L.	25,7	39,0	52,4	6,2	19,8	33,1	23.29.46,8	29. 6,14	6,72			23.29.44,37	G.		
	\odot 2 L.	35,0	48,4	1,8	15,6	29,1	42,4	23.31.56,1	31.15,49	16,07			23.31.53,72	G.		
	α Orionis.....	26,5	40,1	53,8	7,2	20,9	34,4	5.46.48,1	46. 7,29	7,79	37,73		5.46.45,51	G.		
	δ Ursæ Minoris SP.	22,0	8,2	54,0	39,2	30,6	14,2	6.33. 0,4	21.41,23	45,53			18.22.23,27	G.		
	Procyon.....	51,3	5,0	18,2	32,0	45,6	59,0	7.31.12,7	30.31,98	32,50	37,84		7.31.10,27	G.		
	Pollux.....	24,4	39,8	54,9	10,3	25,7	40,9	7.35.56,1	35.10,31	10,72	37,71		7.35.48,49	G.		
	(e) γ 2 L.....	36,4	51,3	6,0	21,1	36,0	50,9	19. 6. 5,8	5.21,08	21,80		0,73	19. 5.59,90	G.		
	α Aquilæ.....	51,9	5,5	18,9	32,8	46,4	0,0	19.43.13,4	42.32,71	33,21	38,04		19.43.11,33	G.		
Mar. 13	(f) \odot 1 L.	4,8	18,4	31,8	45,5	59,0	12,4	23.33.26,0	32.45,41	45,99			23.33.24,23	G.		
	Venus 1 L.....	51,9	5,6	19,2	33,4	47,1	1,0	1.54.14,9	53.33,31	33,79			1.54.12,10	G.		
	(g) α Arietis.....	1,8	16,5	30,7	45,5	0,2	....	1.58.29,4	57.45,54	45,98	38,34		1.58.24,29	G.	
	Castor.	14,2	30,4	46,0	2,1	18,1	34,1	7.24.49,9	24. 2,12	2,49	38,53		7.24.40,97	G.		
	Procyon.....	50,7	4,1	17,7	31,4	44,8	58,3	7.31.12,0	30.31,29	31,81	38,52		7.31.10,29	G.		
	α Hydræ.....	38,0	51,5	5,0	18,8	32,5	46,1	9.19.59,8	19.18,82	19,44	38,48		9.19.57,97	G.		
	Regulus.	45,9	59,9	13,5	27,6	41,1	55,0	10. 0. 8,9	59.27,42	27,89	38,58		10. 0. 6,44	G.		
Mar. 15	α Arietis.....	0,1	14,8	29,2	44,1	58,6	13,0	1.58.27,8	57.43,95	44,39	39,92	0,87		G.		
Mar. 18	(h) \odot 1 L.	16,8	30,3	43,6	57,2	10,7	24,0	23.51.37,6	50.57,17	57,71		1,00	23.51.40,45	G.		
	\odot 2 L.	25,7	39,1	52,4	6,1	19,7	33,1	23.53.46,8	53. 6,13	6,67			23.53.49,41	G.		
	α Andromedæ....	51,4	7,0	22,0	37,4	52,6	8,0	0. 0.23,1	59.37,36	37,72	42,74			G.		
Mar. 19	\odot 2 L.	3,2	16,8	30,1	44,0	57,3	10,9	23.57.24,3	56.43,80	44,33			23.57.28,07	G.		
Mar. 20	(b) Venus 1 L. ....	....	29,0	42,8	....	11,0	24,9	2.25.39,1	24.56,96	57,34		0,96	2.25.42,23	G.
	α Hydræ.....	31,4	45,1	58,5	12,2	26,0	39,4	9.19.52,9	19.12,22	12,74	45,12			G.		
	Regulus.....	39,3	53,1	7,0	21,0	34,9	48,4	10. 0. 2,1	59.20,83	21,21	45,23			G.		
	Mercury 2 L. ....	....	....	42,7	56,6	10,2	....	23. 7.37,5	6.56,51	57,04		0,88	23. 7.42,69	G.
Mar. 21	(i) \odot 1 L.	9,1	....	36,3	50,0	3,4	17,0	0. 2.30,3	1.49,75	50,22			0. 2.35,90	G.	
	\odot 2 L. ....	....	....	....	58,8	12,2	25,7	0. 4.39,2	3.58,69	59,16			0. 4.44,84	G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",69. LEVEL Error = + 0",65. From March 9 = + 0",47. From March 18 = - 0",33. AZIMUTH Error = + 6",92. From March 9 = + 8",57. From March 20 = + 7",38.

(a) Hazy and faint. (b) Cloudy. (c) Large disk. (d) Temp. 42°. (e) Cloudy at the last two wires. (f) The other limb was quite clouded. (g) Frequently faint from clouds. (h) Temp. 39°. (i) Very badly defined, and often cloudy.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Mar. 21	Venus 1 L. ....	....	0,1	14,4	28,6	42,6	56,8	2	30	10,8	29	28,53	28,90		0,88	2	30	14,67	G.
	Castor	7,0	22,8	38,5	54,8	10,8	26,4	7	24	42,3	23	54,66	54,95	45,92		7	24	40,90	G.
	(a) Procyon	43,1	56,9	10,1	23,9	37,2	51,0	7	31	4,3	30	23,79	24,21	45,99		7	31	10,17	G.
	Pollux	16,1	31,4	46,6	2,1	17,5	32,6	7	35	47,9	35	2,04	2,36	45,92		7	35	48,32	G.
	Regulus	38,2	52,4	6,0	20,0	34,0	47,6	10	0	1,4	59	19,95	20,33	46,10		10	0	6,38	G.
Mar. 22	(b) ☉ 1 L.	46,9	0,4	13,8	27,5	41,0	54,3	0	6	7,9	5	27,40	27,86			0	6	14,42	G.
Mar. 23	Procyon	41,2	54,9	8,2	22,0	35,4	48,9	7	31	2,2	30	21,84	22,26	47,91	0,95	7	31	10,13	G.
	Regulus	36,7	50,5	4,0	18,1	32,0	45,5	9	59	59,3	59	18,02	18,40	48,01		10	0	6,37	G.
	β Leonis	38,8	52,8	6,5	20,7	34,5	48,6	11	41	2,4	40	20,62	20,99	47,93		11	41	9,02	G.
Mar. 25	δ Leonis	17,4	32,0	46,1	1,0	15,5	29,9	11	5	44,4	5	0,91	1,30	49,93	1,01				G.
	(c) B. xi. 687.	19,6	33,0	46,7	0,1	13,7	27,1	11	38	40,8	38	0,15	0,61			11	38	50,56	G.
	β Leonis	36,6	50,6	4,5	18,6	32,6	46,6	11	41	0,4	40	18,56	18,97	49,95					G.
Mar. 26	(d) Venus 1 L.	33,9	....	2,1	16,4	....	44,9	2	52	59,0	52	16,44	16,86		1,06	2	53	7,46	G.
	☽ 1 L.	20,3	35,1	50,0	5,0	20,0	34,8	6	2	49,6	2	4,97	5,36			6	2	56,10	G.
	μ Geminorum.	58,4	13,1	27,4	42,1	56,9	11,2	6	13	25,9	12	42,15	42,55			6	13	33,29	G.
	γ Geminorum.	10,5	24,4	38,6	52,9	7,1	21,0	6	28	35,0	27	52,79	53,21			6	28	43,96	G.
	Castor	1,9	17,9	33,6	49,7	5,7	21,5	7	24	37,3	23	49,66	50,00	50,77		7	24	40,80	G.
	Procyon	38,1	51,9	5,2	19,0	32,6	46,0	7	30	59,4	30	18,89	19,36	50,76		7	31	10,16	G.
	Pollux	11,0	26,4	41,5	57,0	12,4	27,6	7	35	43,0	34	56,99	57,36	50,83		7	35	48,17	G.
	β Leonis	35,5	49,7	3,4	17,5	31,5	45,5	11	40	59,4	40	17,50	17,91	51,02		11	41	8,90	G.
	Polaris SP.	18,8	48,2	16,6	....	....	42,0	13	27	17,0	1	46,68	53,79						G.
	(e) Mercury 2 L.	51,8	5,4	18,7	32,5	46,0	59,3	23	53	13,0	52	32,39	32,99		1,14	23	53	25,68	G.
	(f) ☉ 1 L.	29,0	42,1	55,8	9,5	23,0	36,4	0	27	50,0	27	9,40	9,97			0	28	2,68	G.
Mar. 28	☉ 2 L.	37,5	51,0	4,4	18,1	31,7	45,0	0	29	58,7	29	18,06	18,63			0	30	11,34	G.
	Venus 1 L.	45,0	59,4	13,4	28,0	42,1	56,4	3	2	10,8	1	27,87	28,33			3	2	21,16	G.
	κ Geminorum.	8,9	22,9	36,8	51,0	5,0	19,0	7	24	33,0	23	50,95	51,42			7	24	44,46	G.
	Procyon	36,1	49,4	2,9	16,7	30,2	43,8	7	30	57,2	30	16,62	17,16	52,93		7	31	10,21	G.
	Pollux	8,9	24,1	39,2	54,8	10,0	25,4	7	35	40,8	34	54,74	55,15	53,00		7	35	48,20	G.
	☽ 1 L.	28,8	43,2	57,7	12,3	26,7	41,0	7	50	55,4	50	12,16	12,64			7	51	5,70	G.
	θ Cancri	8,0	22,2	36,2	50,9	5,1	19,1	8	22	33,3	21	50,69	51,15			8	22	44,24	G.
	δ Cancri	15,1	29,5	43,7	58,0	12,1	26,3	8	35	40,5	34	57,89	58,35			8	35	51,45	G.
	ε Hydræ	59,0	12,4	25,9	39,8	53,3	6,8	8	38	20,4	37	39,66	40,19	53,31		8	38	33,29	G.
	α Hydræ	23,3	37,0	50,4	4,2	17,9	31,3	9	19	44,9	19	4,14	4,78	52,99		9	19	57,91	G.
	β Leonis	33,2	47,0	1,0	15,2	29,2	43,2	11	40	57,1	40	15,13	15,60	53,33		11	41	8,85	G.
	Polaris S.P. ....	....	....	....	38,2	14,4	39,8	13	27	12,8	1	42,76	52,04			1	2	45,35	G.
	Spica	27,1	40,8	54,1	8,2	21,6	35,5	13	16	49,1	16	8,06	8,71	53,31		13	17	2,03	G.
	(g) ☉ 1 L.	5,7	19,3	32,8	46,4	0,0	13,4	0	31	26,8	30	46,34	46,90		1,13	0	31	40,73	G.
	☉ 2 L.	14,5	28,0	41,4	55,1	8,6	22,1	0	33	35,7	32	55,06	55,62			0	33	49,45	G.
	(h) Polaris .....	....	4,2	25,4	1,8	31,2	56,6	1	18	....	1	59,70	51,37			1	2	45,23	G.
Mar. 29	Venus 1 L.	21,7	36,0	50,0	4,8	19,0	33,1	3	6	47,2	6	4,54	5,00			3	6	58,96	G.
	β Tauri .....	....	2,8	17,8	33,3	48,5	3,9	5	16	19,1	15	33,24	33,65	54,11		5	16	27,71	G.
	Pollux .....	....	....	....	....	9,0	24,2	7	35	39,3	34	53,53	53,94	54,20		7	35	48,11	G.
	θ Cancri	6,9	21,1	35,1	49,6	3,9	18,0	8	22	32,1	21	49,53	49,99			8	22	44,19	G.
	δ Cancri	14,0	28,1	42,2	56,9	10,9	25,1	8	35	39,3	34	56,64	57,10			8	35	51,32	G.
	☽ 1 L.	12,6	26,9	40,8	55,1	9,3	23,6	8	44	37,7	43	55,14	55,63			8	44	49,85	G.
	κ Cancri .....	....	....	....	25,5	39,2	52,9	8	59	6,7	58	25,43	25,93			8	59	20,16	G.
	α Hydræ	22,1	35,7	49,0	3,0	16,8	30,2	9	19	43,8	19	2,95	3,59	54,17		9	19	57,84	G.
	ξ Leonis	58,6	12,2	26,1	40,0	53,8	7,4	9	23	21,2	22	39,91	40,40			9	23	34,65	G.
	Regulus	30,1	44,0	57,5	11,7	25,3	39,0	9	59	53,0	59	11,52	12,01	54,36		10	0	6,29	G.
	Mercury 2 L.	26,1	39,7	53,1	6,5	20,2	33,8	0	6	47,1	6	6,64	7,23		1,12	0	7	2,20	G.
	(i) ☉ 1 L.	42,7	56,1	9,4	23,1	36,7	50,1	0	35	3,8	34	23,14	23,70			0	35	18,70	G.
	☉ 2 L.	51,4	5,0	18,2	32,0	45,5	59,0	0	37	12,5	36	31,95	32,51			0	37	27,51	G.
	α Arietis	45,0	59,5	15,9	28,7	43,1	58,0	1	58	12,5	57	28,67	29,11	55,11		1	58	24,17	G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1".69. From March 25 = + 1".95. LEVEL Error = - 0".33. From March 25 = + 0".16. AZIMUTH Error = + 7".38. From March 27 = + 8".74.

(a) Observer disturbed. (b) Cloudy at wire VII. (c) Excessively faint. (d) Clouds passing rapidly.
(e) Unsteady. (f) Often cloudy. (g) Temp. 49°. (h) Extremely unsteady. (i) Temp. 50°.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Mar. 30	Venus 1 L.	58,8	13,1	27,1	41,8	56,1	10,5	3. 11. 24,7	10. 41,74	42,20		1,12	3. 11. 37,32	G.
	Rigel	27,0	40,8	54,1	7,9	21,7	35,1	5. 6. 48,8	6. 7,92	8,57	55,17		5. 7. 3,78	G.
	β Tauri	46,1	1,5	16,5	32,1	47,5	2,5	5. 16. 18,1	15. 32,05	32,46	55,27		5. 16. 27,68	G.
	α Orionis	8,9	22,3	35,8	49,6	3,0	16,7	5. 46. 30,2	45. 49,50	50,02	55,19		5. 46. 45,26	G.
	κ Cancri	43,1	56,9	10,6	24,4	38,0	51,8	8. 59. 5,5	58. 24,33	24,83			8. 59. 20,22	G.
	α Hydræ	20,9	34,7	48,0	1,9	15,4	29,0	9. 19. 42,6	19. 1,79	2,43	55,32		9. 19. 57,83	G.
	ξ Leonis	57,3	11,1	24,8	38,9	52,5	6,2	9. 23. 20,0	22. 38,69	39,18			9. 23. 34,59	G.
	γ 1 L.	51,5	5,4	19,1	33,4	47,3	1,2	9. 38. 15,1	37. 33,29	33,81			9. 38. 29,23	G.
	π Leonis .....	....	....	....	....	18,4	32,1	9. 51. 45,5	51. 4,72	5,24			9. 52. 0,67	G.
	Regulus	29,0	42,8	56,3	10,4	24,2	38,1	9. 59. 51,6	59. 10,35	10,84	55,52		10. 0. 6,28	G.
Mar. 31	α Andromedæ ....	....	....	....	23,1	38,2	53,3	0. 0. 8,7	59. 22,88	23,33	57,23	1,13	0. 0. 20,50	G.
	Mercury 2 L.	17,0	30,6	44,0	57,5	11,1	24,8	0. 20. 38,2	19. 57,60	58,27			0. 20. 55,45	G.
Apr. 1	(a) \odot 1 L.	56,4	9,9	23,7	37,3	51,0	4,2	0. 42. 18,0	41. 37,22	37,84			0. 42. 35,04	G.
	(a) \odot 2 L.	5,4	19,0	32,2	46,0	59,6	13,0	0. 44. 26,7	43. 45,99	46,61			0. 44. 43,81	G.
	(b) Polaris .....	....	....	46,4	59,4	29,0	53,0	1. 27. 22,8	2. 1,53	50,02			1. 2. 47,24	G.
	(c) α Arietis	42,5	56,9	11,4	26,4	41,0	55,7	1. 58. 10,1	57. 26,29	26,78	57,44		1. 58. 24,04	G.
	Venus 1 L.	14,9	29,7	43,9	58,4	13,0	27,1	3. 20. 41,5	19. 58,36	58,86			3. 20. 56,19	G.
	Procyon.	31,2	44,9	58,2	12,0	25,6	39,0	7. 30. 52,6	30. 11,94	12,56	57,46		7. 31. 10,08	G.
	Σ 1263. <i>sp.</i>	1,8	20,1	38,0	56,5	14,7	32,9	8. 34. 51,1	33. 56,45	56,77			8. 34. 54,34	G.
	Σ 1276. <i>np.</i>	3,1	16,8	30,4	44,4	58,1	11,9	8. 38. 25,7	37. 44,34	44,89			8. 38. 42,47	G.
	(d) Σ 1287 .....	....	30,9	44,4	58,6	12,3	26,0	8. 42. 39,9	41. 58,44	58,99			8. 42. 56,57	G.
	(e) Σ 1297	50,2	5,0	19,5	34,3	48,9	3,8	8. 51. 18,2	50. 34,28	34,77			8. 51. 32,36	G.
	Σ 1332. <i>sp.</i>	39,0	53,8	8,4	23,5	38,1	52,8	9. 8. 7,8	7. 23,25	23,83			9. 8. 21,43	G.
	(f) Σ 201.	1,9	17,1	32,4	47,9	3,2	18,4	9. 14. 33,9	13. 47,83	48,27			9. 14. 45,87	G.
	α Hydræ	18,8	32,4	45,8	59,6	13,1	26,5	9. 19. 40,1	18. 59,48	0,21	57,52		9. 19. 57,82	G.
	d Leonis	54,2	7,8	21,1	35,0	48,4	1,9	10. 52. 15,4	51. 34,83	35,47			10. 52. 33,15	G.
	(f) Σ 1506.	11,6	25,1	38,6	52,1	5,7	19,1	10. 56. 32,6	55. 52,12	52,81			10. 56. 50,50	G.
	(g) Σ 231. <i>nf.</i>	47,7	3,5	19,1	35,0	50,8	6,5	11. 2. 22,3	1. 34,99	35,40			11. 2. 33,09	G.
	ϕ Leonis	7,9	21,4	34,9	48,6	2,0	15,5	11. 8. 29,0	7. 48,47	49,16			11. 8. 46,85	G.
	(f) Σ 1534.	0,9	15,1	29,2	43,8	58,0	12,1	11. 13. 26,5	12. 43,67	44,18			11. 13. 41,88	G.
	γ 1 L.	2,5	16,4	30,0	44,1	58,0	11,7	11. 27. 25,7	26. 44,06	44,75			11. 27. 42,46	G.
	β Leonis	28,8	42,8	56,6	10,8	24,9	38,7	11. 40. 52,7	40. 10,76	11,28	57,65		11. 41. 9,00	G.
	β Virginis. ....	....	....	25,3	39,0	52,4	5,9	11. 42. 19,4	41. 38,92	39,57			11. 42. 37,29	G.
	(f) Σ 1581	6,2	26,0	45,3	5,2	24,9	44,0	11. 48. 3,8	47. 5,06	5,33			11. 48. 3,06	G.
	(h) Σ 3078	42,3	56,1	9,9	23,9	37,7	51,1	12. 1. 5,1	0. 23,74	24,29			12. 1. 22,03	G.
	η Virginis.	19,7	33,4	46,6	0,4	13,7	27,1	12. 11. 40,8	11. 0,25	0,92			12. 11. 58,66	G.
	Polaris SP. ....	....	....	4,5	35,0	10,0	34,2	13. 27. 3,8	1. 36,79	49,41			1. 2. 47,19	G.
	Spica	22,2	36,1	49,7	3,6	17,4	30,9	13. 16. 44,6	16. 3,51	4,26	57,80		13. 17. 2,05	G.
	α Andromedæ.	35,9	51,0	6,1	21,9	37,1	52,3	0. 0. 7,6	59. 21,71	22,16	58,42	1,08	0. 0. 20,49	G.
	Mercury 2 L.	19,0	32,7	46,0	59,7	13,1	26,6	0. 27. 40,1	26. 59,60	0,26			0. 27. 58,61	G.
Apr. 2	\odot 1 L.	33,6	47,1	0,7	14,2	27,9	41,5	0. 45. 55,0	45. 14,29	14,92			0. 46. 13,29	G.
	\odot 2 L.	42,4	56,1	9,5	23,3	36,9	50,3	0. 48. 3,8	47. 23,19	23,82			0. 48. 22,19	G.
	(i) Polaris. ....	....	....	31,6	14,2	27,5	51,0	1. 27. 20,2	2. 0,34	48,83			1. 2. 47,21	G.
	Venus 1 L.	54,5	8,9	23,1	37,7	52,1	6,5	3. 25. 21,1	24. 37,70	38,20			3. 25. 36,68	G.
	Pollux. ....	....	....	33,4	49,0	4,3	19,5	7. 35. 35,1	34. 48,95	49,40	58,66		7. 35. 48,07	G.
	α Hydræ	17,6	31,1	44,4	58,5	11,9	25,6	9. 19. 39,0	18. 58,30	59,03	58,68		9. 19. 57,78	G.
	Regulus ..	25,5	39,4	53,0	7,1	20,8	34,7	9. 59. 48,5	59. 7,00	7,54	58,79		10. 0. 6,32	G.
	(h) Σ 213.	36,6	52,0	7,0	22,4	37,7	53,0	10. 4. 8,2	3. 22,42	22,87			10. 4. 21,65	G.
	(k) Σ 217.	48,0	2,2	16,2	30,6	44,7	59,1	10. 18. 13,1	17. 30,56	31,08			10. 18. 29,87	G.
	β Virginis.	57,2	10,9	24,1	37,8	51,2	4,7	11. 42. 18,1	41. 37,72	38,37			11. 42. 37,23	G.
	η Virginis.	18,4	32,1	45,6	59,2	12,6	26,0	12. 11. 39,5	10. 59,06	59,73			12. 11. 58,61	G.
	γ 1 L.	3,9	17,8	31,7	46,0	0,1	13,9	12. 24. 28,0	23. 45,92	46,66			12. 24. 45,55	G.
	Σ 1678. <i>nf.</i>	59,0	13,3	27,0	41,0	54,9	8,9	12. 37. 22,9	36. 41,01	41,54			12. 37. 40,44	G.
	(l) Σ 1680	51,2	6,1	20,1	35,0	49,7	4,1	12. 41. 18,8	40. 35,00	35,49			12. 41. 34,39	G.
	θ Virginis.	15,7	29,2	42,7	56,3	9,8	23,1	13. 1. 36,7	0. 56,31	57,02			13. 1. 55,94	G.
	Spica	21,4	35,1	48,6	2,4	16,1	29,7	13. 16. 43,5	16. 2,41	3,16	58,91		13. 17. 2,09	G.
	α Andromedæ.	35,1	50,2	5,2	20,9	36,0	51,0	0. 0. 6,6	59. 20,72	21,17	59,42	0,98	0. 0. 20,52	G.
	Mercury 2 L.	25,6	39,2	52,5	6,2	19,9	33,2	0. 34. 47,0	34. 6,23	6,88			0. 35. 6,25	G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",95. LEVEL Error = + 0",16. From March 31 = - 0",10. AZIMUTH Error = 8",74. From March 31 = + 10",53.

(a) Very bad definition. (b) Extremely unsteady. (c) Seen by flashes. (d) Not seen double: no other near. (e) The observer thought he saw a faint companion south following. (f) No other near. (g) The small companion seen. (h) Not seen double. (i) Wires III. and IV. unsatisfactory. (k) Seen double, very close: a smaller precedes. (l) To appearance single: no other near.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Apr. 3	⊙ 1 L.	11,0	24,6	38,0	51,8	5,2	18,8	0.49.	32,2		48.51,66	52,29			0,98	0.49.	51,67	G.	
	⊙ 2 L.	19,9	33,2	46,9	0,5	14,0	27,7	0.51.	41,1		51.0,48	1,11				0.52.	0,49	G.	
	Venus 1 L.	34,0	48,6	3,0	17,6	32,0	46,4	3.30.	1,0		29.17,52	18,01				3.30.	17,50	G.	
	Aldebaran.	17,7	31,7	45,4	59,8	13,9	27,9	4.26.	41,8		25.59,75	0,27	59,45			4.26.	59,80	G.	
	(a) β Tauri.	41,8	57,0	12,1	27,8	43,0	58,2	5.16.	13,6		15.27,65	28,10	59,57			5.16.	27,66	G.	
	Σ 1297.	48,2	2,9	17,2	32,0	46,7	1,4	8.51.	16,0		50.32,06	32,55				8.51.	32,26	G.	
	(b) Σ 197.	45,5	59,1	12,2	25,9	39,7	52,9	9.1.	6,5		0.25,97	26,61				9.1.	26,33	G.	
	(c) Σ 1324.	8,9	24,3	39,2	54,4	9,6	24,3	9.4.	39,8		3.54,36	54,82				9.4.	54,54	G.	
	(d) Σ 3121.	53,4	8,8	24,0	39,7	55,1	10,5	9.8.	25,9		7.39,62	40,07				9.8.	39,79	G.	
	Σ 201.	59,6	15,1	30,1	45,8	1,0	16,2	9.14.	31,5		13.45,62	46,06				9.14.	45,79	G.	
	α Hydræ.	16,4	30,1	43,6	57,4	11,1	24,5	9.19.	38,2		18.57,33	58,06	59,64			9.19.	57,79	G.	
	θ Virginis.	14,8	28,4	41,7	55,3	8,9	22,2	13.1.	35,8		0.55,30	56,01				13.1.	55,89	G.	
	Spica.	20,4	34,0	47,5	1,6	15,0	28,9	13.16.	42,7		16.1,45	2,20	59,87			13.17.	2,09	G.	
	(d) Σ 266.	10,1	24,2	38,0	52,2	6,4	20,2	13.20.	34,4		19.52,22	52,75				13.20.	52,64	G.	
	(e) δ 2 L.	1,1	15,3	29,6	44,2	58,4	12,9	13.26.	27,1		25.44,09	44,88				13.26.	44,78	G.	
	(c) Σ 1781.	39,1	52,4	6,0	19,7	33,4	46,9	13.38.	0,2		37.19,68	20,29				13.38.	20,20	G.	
	(f) Σ 271.	37,0	50,6	4,3	18,2	32,0	45,7	13.45.	59,2		45.18,15	18,71				13.46.	18,62	G.	
	κ Virginis.	56,5	10,1	23,6	37,5	51,0	4,8	14.4.	18,1		3.37,37	38,12				14.4.	38,04	G.	
	(g) Arcturus.	52,0	6,6	20,7	35,2	49,7	3,9	14.8.	18,3		7.35,20	35,70	60,05			14.8.	35,63	G.	
	λ Virginis.	1,9	15,7	29,1	43,1	57,0	10,7	14.10.	24,7		9.43,18	43,95				14.10.	43,88	G.	
	(h) α Andromedæ.	33,9	49,1	4,2	19,9	35,0	50,1	0.0.	5,7		59.19,70	20,15	60,46	1,01		0.0.	20,46	G.	
	Mercury 2 L. ....	....	....	....	18,0	31,6	44,9	0.41.	58,7		41.17,94	18,59				0.42.	18,93	G.
Apr. 4	⊙ 1 L.	48,4	2,3	15,7	29,3	42,9	56,2	0.53.	10,0		52.29,26	29,87				0.53.	30,22	G.	
	⊙ 2 L.	57,4	11,0	24,4	38,2	51,9	5,3	0.55.	18,9		54.38,16	38,77				0.55.	39,12	G.	
	(i) Aldebaran.	16,7	30,7	44,4	58,8	12,8	26,7	4.26.	40,8		25.58,70	59,22	60,49			4.26.	59,72	G.	
	α Hydræ.	15,6	29,2	42,5	56,4	10,0	23,4	9.19.	37,0		18.56,30	57,03	60,66			9.19.	57,73	G.	
	Spica.	19,4	33,1	46,9	0,4	14,0	27,9	13.16.	41,4		16.0,45	1,20	60,88			13.17.	2,07	G.	
	κ Virginis.	55,2	9,2	22,8	36,5	50,0	3,7	14.4.	17,4		3.36,40	37,15				14.4.	38,05	G.	
	Arcturus.	51,6	5,9	20,0	34,4	48,7	3,0	14.8.	17,4		7.34,43	34,93	60,83			14.8.	35,83	G.	
Apr. 5	α Andromedæ.	31,8	47,1	2,1	17,8	33,0	48,2	0.0.	3,4		59.17,63	18,03	62,60	1,03		0.0.	20,59	G.	
Apr. 6	(k) ⊙ 1 L.	4,0	17,8	31,1	45,0	....	....	0.59.	....		59.44,87	45,44				1.0.	48,05	G.
	Castor.	49,5	5,5	21,2	37,2	53,2	9,1	7.24.	25,0		23.37,24	37,59	62,97			7.24.	40,47	G.	
	Procyon.	26,0	39,5	53,0	6,8	20,2	33,6	7.30.	47,1		30.6,60	7,18	62,76			7.31.	10,06	G.	
	Pollux.	58,9	14,0	29,2	44,8	0,1	15,4	7.35.	30,6		34.44,71	45,11	62,88			7.35.	48,08	G.	
	(l) Σ 1661. ....	....	39,7	53,1	7,1	21,0	34,5	12.27.	48,4		27.7,08	7,60				12.28.	10,69	G.
	(m) Σ 254.	20,9	47,8	14,2	41,0	7,8	34,3	12.37.	1,4		35.41,06	41,00				12.36.	44,10	G.	
	Σ 1680.	47,3	1,9	16,1	31,2	46,1	0,4	12.41.	14,9		40.31,14	31,59				12.41.	34,70	G.	
	(n) 35 Comæ.	52,9	7,2	21,5	36,4	51,0	5,6	12.45.	20,0		44.36,37	36,82				12.45.	39,93	G.	
	(o) Σ 1699.	23,0	38,0	53,6	9,0	24,0	39,7	12.50.	54,8		50.8,87	9,27				12.51.	12,38	G.	
	(o) Σ 260.	47,9	3,0	17,8	33,5	48,9	4,0	13.0.	19,2		59.33,48	33,88				13.0.	37,00	G.	
Arcturus.	49,0	3,5	17,9	32,1	46,6	0,9	14.8.	15,2		7.32,18	32,64	63,14			14.8.	35,81	G.		
Apr. 8	(p) ⊙ 1 L.	20,8	34,5	47,8	1,5	15,2	29,0	1.7.	42,6		7.1,64	1,95			0,91	1.8.	6,44	G.	
	⊙ 2 L.	30,1	43,5	57,0	11,0	24,4	38,1	1.9.	51,8		9.10,85	11,16				1.10.	15,65	G.	
	Aldebaran.	12,8	27,0	40,7	55,1	9,0	22,9	4.26.	37,0		25.54,93	55,20	64,46			4.26.	59,82	G.	
	Castor.	47,9	3,8	19,5	35,6	51,5	7,4	7.24.	23,3		23.35,57	35,78	64,74			7.24.	40,51	G.	
	Procyon.	24,3	37,9	51,2	5,0	18,5	32,0	7.30.	45,5		30.4,91	5,23	64,67			7.31.	9,96	G.	
	Σ 1263. sp.	54,6	13,0	30,9	49,3	7,6	25,8	8.34.	44,1		33.49,33	49,50				8.34.	54,28	G.	
	Σ 1276. np.	55,9	9,7	23,2	37,1	51,0	4,8	8.38.	18,6		37.37,19	37,48				8.38.	42,26	G.	
	(f) Σ 1287.	10,0	23,8	37,5	51,4	5,2	19,0	8.42.	32,7		41.51,38	51,67				8.42.	56,45	G.	
	Σ 1297.	43,2	58,0	12,4	27,2	42,0	56,5	8.51.	11,1		50.27,20	27,46				8.51.	32,24	G.	
	(b) Σ 197.	40,5	54,0	7,2	21,1	34,7	48,0	9.1.	1,6		0.21,02	21,35				9.1.	26,14	G.	
	Σ 1324.	4,1	19,3	34,1	49,7	4,6	19,5	9.4.	34,7		3.49,43	49,67				9.4.	54,46	G.	
	Σ 1332. sp.	32,0	46,8	1,4	16,5	31,2	45,9	9.8.	0,6		7.16,35	16,60				9.8.	21,40	G.	
	(f) Σ 201.	54,8	10,0	25,2	40,9	56,2	11,3	9.14.	27,0		13.40,78	41,01				9.14.	45,81	G.	
	α Hydræ.	11,7	25,3	38,6	52,4	6,0	19,5	9.19.	33,0		18.52,36	52,76	64,88			9.19.	57,56	G.	
	(q) Σ 205.	47,4	5,7	23,1	41,8	59,8	17,9	9.32.	35,7		31.41,63	41,80				9.32.	46,61	G.	
	ε Bootis.	22,3	37,7	52,7	8,2	23,4	38,4	14.37.	53,9		37.8,09	8,32	65,01			14.38.	13,32	G.	

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1".95. LEVEL Error = - 0".10. From April 5 = - 0".81. AZIMUTH Error = + 10".53. From April 8 = + 5".26. (See Introduction.)

(a) Wind shaking the telescope. (b) Seen double, but observed as single. (c) To appearance single: no other near. (d) Seemed double. (e) Much tremor. (f) No other near. (g) Indefinite. (h) Very faint. (i) Clouds passing. (k) Clouded at the other wires. (l) The observer thought he saw it double. (m) A smaller of 1' less N.P.D. precedes it. (n) Small companion seen. (o) As single: no other near. (p) Very badly defined. (q) A smaller star of 3' greater N.P.D. preceded about 25".

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Apr. 8	α^2 Libræ	31,0	45,2	59,1	13,2	27,2	41,1	14. 41. 55,2	41. 13,15	13,60	65,15	0,91	14. 42. 18,61	G.
Apr. 9	☉ 1 L.	59,4	13,0	26,4	40,2	53,7	7,4	1. 11. 21,1	10. 40,18	40,49		0,92	1. 11. 45,87	G.
	☉ 2 L.	8,5	22,2	35,9	49,4	3,1	16,6	1. 13. 30,2	12. 49,42	49,73			1. 13. 55,11	G.
	Venus 1 L.	44,4	59,2	14,0	28,7	43,4	57,9	3. 58. 12,5	57. 28,59	28,85			3. 58. 34,33	G.
	Aldebaran.	11,8	25,9	39,8	54,0	8,0	21,9	4. 26. 36,0	25. 53,92	54,19	65,46		4. 26. 59,69	G.
	Rigel	16,9	30,4	44,0	57,6	11,3	24,9	5. 6. 38,6	5. 57,67	58,07	65,52		5. 7. 3,60	G.
	β Tauri	36,1	51,1	6,4	21,9	37,3	52,4	5. 16. 7,9	15. 21,88	22,11	65,47		5. 16. 27,64	G.
	Σ 1263. <i>sp.</i>	53,8	12,1	30,0	48,5	6,7	24,7	8. 34. 42,9	33. 48,39	48,56			8. 34. 54,22	G.
	(a) Σ 1276. <i>np.</i>	55,0	8,7	22,4	36,3	50,0	3,8	8. 38. 17,6	37. 36,26	36,55			8. 38. 42,21	G.
	Σ 1287.	9,0	23,0	36,5	50,6	4,3	18,0	8. 42. 32,0	41. 50,49	50,78			8. 42. 56,44	G.
	(b) Σ 1324.	3,0	18,1	33,3	48,5	3,6	18,7	9. 4. 33,9	3. 48,45	48,69			9. 4. 54,37	G.
	(c) Σ 3121.	47,4	3,0	18,1	33,9	49,2	4,5	9. 8. 20,0	7. 33,74	33,97			9. 8. 39,65	G.
	α Hydræ	10,8	24,4	37,8	51,5	5,0	18,8	9. 19. 32,1	18. 51,49	51,89	65,73		9. 19. 57,58	G.
	Σ 205.	46,6	4,6	22,4	40,7	58,8	16,8	9. 32. 34,9	31. 40,69	40,86			9. 32. 46,55	G.
	(d) ϕ Ursæ Majoris...	14,6	38,1	1,1	24,9	48,2	11,6	9. 41. 35,0	40. 24,79	24,89			9. 41. 30,59	G.
	H. C. 19435.	13,4	28,3	43,2	58,3	13,2	28,1	9. 47. 43,2	46. 58,25	58,50			9. 48. 4,21	G.
	Regulus	18,8	32,5	46,2	0,0	14,0	27,9	9. 59. 41,7	59. 0,16	0,45	65,80		10. 0. 6,16	G.
	α Aquilæ	24,6	38,3	52,0	5,9	19,2	33,0	19. 42. 46,6	42. 5,66	5,97	66,05	+0,96	19. 43. 12,08	G.
γ 2 L.	54,7	9,2	23,6	38,5	53,1	7,9	19. 45. 22,3	44. 38,47	38,94			19. 45. 45,05	G.	
(b) α Pegasi	12,2	26,0	39,7	54,0	8,1	21,6	22. 57. 35,6	56. 53,89	54,17	6,28		22. 57. 0,41	G.	
α Andromedæ.	28,2	43,7	58,7	14,2	29,5	44,6	0. 1. 0,0	0. 14,14	14,37	6,32		0. 0. 20,65	G.	
(e) Polaris M.	40,8	21,0	3,6	50,0	30,4	10,8	1. 4. 48,2	2. 43,86	38,73			1. 2. 45,05	G.	
Apr. 10	☉ 1 L.	38,4	52,0	5,3	19,2	32,9	46,4	1. 16. 0,2	15. 19,20	19,51			1. 15. 25,84	G.
	☉ 2 L.	47,6	1,3	14,7	28,8	42,2	56,0	1. 18. 9,2	17. 28,55	28,86			1. 17. 35,19	G.
	Mercury 1 L.	19,7	33,7	47,0	1,2	14,9	28,3	1. 27. 42,0	27. 0,98	1,29			1. 27. 7,63	G.
	Venus 1 L.	27,9	42,5	57,1	12,0	26,8	41,6	4. 3. 56,2	3. 12,02	12,28			4. 3. 18,72	G.
	(f) Polaris SP. M. ...	20,8	5,2	47,6	28,4	12,0	57,4	13. 4. 39,2	2. 32,63	38,25			1. 2. 45,05	G.
	Spica	13,8	27,5	41,0	55,0	8,7	22,1	13. 17. 35,9	16. 54,86	55,27	6,86		13. 17. 2,08	G.
	Arcturus	45,7	0,1	14,2	28,9	43,2	57,4	14. 9. 11,8	8. 28,76	29,02	6,81		14. 8. 35,86	G.
γ 2 L.	43,1	57,3	11,6	26,0	40,2	54,5	20. 41. 9,0	40. 25,96	26,41			20. 40. 33,52	G.	
Apr. 11	☉ 1 L.	17,7	31,3	44,8	58,5	12,2	25,9	1. 19. 39,6	18. 58,57	58,88			1. 19. 6,17	G.
	(g) ☉ 2 L.	27,1	40,9	54,2	8,0	21,8	35,6	1. 21. 49,1	21. 8,10	8,41			1. 21. 15,70	G.
	(h) Mercury 1 L.	0,8	14,4	28,0	41,9	55,7	....	1. 34.	34. 41,89	42,19			1. 34. 49,49	G.
Apr. 12	(i) ☉ 1 L.	57,2	11,0	24,6	38,5	52,0	....	1. 23. 19,4	22. 38,34	38,65			1. 22. 46,91	G.
	☉ 2 L.	6,9	20,5	34,0	48,0	1,6	15,1	1. 25. 28,6	24. 47,82	48,13			1. 24. 56,39	G.
	Venus 1 L.	56,0	10,7	25,4	40,3	55,0	9,7	4. 13. 24,4	12. 40,22	40,48			4. 12. 48,85	G.
Apr. 15	(i) ☉ 1 L.	57,9	11,7	25,1	39,0	52,8	6,2	1. 34. 20,0	33. 38,96	39,33		+1,00	1. 33. 50,49	G.
Apr. 16	Regulus. ....	....	25,9	39,5	53,4	7,3	20,9	10. 0. 35,0	59. 53,42	53,77	12,40		10. 0. 6,29	G.
	(k) Σ 213.	23,0	38,3	53,4	8,9	24,1	39,3	10. 4. 54,5	4. 8,79	9,07			10. 4. 21,59	G.
	B.A.C. 3506.	53,0	7,4	21,4	35,7	50,0	4,0	10. 8. 18,2	7. 35,67	35,99			10. 7. 48,51	G.
	Σ 218.	35,6	49,2	2,5	16,1	29,7	43,1	10. 19. 56,4	19. 16,09	16,49			10. 19. 29,02	G.
	β Leonis.	14,0	28,0	41,9	56,0	10,0	24,0	11. 41. 37,9	40. 55,97	56,30	12,57		11. 41. 8,89	G.
	Spica	7,9	21,5	35,0	49,0	2,6	16,2	13. 17. 30,0	16. 48,89	49,38	12,78		13. 17. 2,03	G.
	Σ 1808. <i>sp.</i>	10,4	25,4	40,5	56,0	11,1	26,2	14. 3. 41,5	2. 55,87	56,15			14. 3. 8,84	G.
	(l) Σ 1812. <i>np.</i>	32,9	48,9	4,0	20,0	35,3	50,7	14. 6. 6,2	5. 19,72	19,99			14. 5. 32,68	G.
	Arcturus	40,1	54,2	8,4	22,8	37,2	51,5	14. 9. 6,0	8. 22,89	23,20	12,68		14. 8. 35,89	G.
	(m) Polaris. ....	....	....	10,2	....	....	34,8	1. 28. 2,0	2. 39,44	32,21		0,99	1. 2. 45,37	G.
	Apr. 17	(n) ☉ 1 L.	20,0	33,9	47,4	1,3	15,0	28,9	1. 41. 42,6	41. 1,31	1,67			1. 41. 14,86	G.
☉ 2 L.		30,1	43,7	57,3	11,2	25,1	38,6	1. 43. 52,5	43. 11,22	11,58			1. 43. 24,77	G.
(k) Σ 1534.		45,0	59,3	13,4	28,0	42,1	56,4	11. 14. 10,4	13. 27,80	28,12			11. 13. 41,70	G.
(o) Σ 1558. ....		....	....	....	21,9	36,5	51,1	11. 29. 5,1	28. 21,77	22,08			11. 28. 35,67	G.
β Leonis.		13,0	27,1	41,0	55,0	9,1	22,9	11. 41. 37,0	40. 55,01	55,34	13,53		11. 41. 8,94	G.
Polaris SP.		58,8	26,6	54,7	20,2	59,0	....	13. 10.	2. 23,99	31,87			1. 2. 45,53	G.
(p) Σ 1805. <i>sp.</i>		15,1	28,3	41,7	55,2	9,0	....	14. 2.	1. 55,37	55,77			14. 2. 9,47	G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1".95. LEVEL Error = - 0".81. AZIMUTH Error = + 5".26.
From April 15 = + 6".68. After the observation of the Moon on April 9, Hardy was put forward 1^m.

(a) The north preceding seems rather the smaller. (b) Faint. (c) Seen double, but observed as single. (d) Seen elongated: observed as single. (e) Unsteady. The interval between two consecutive wires is about 41". (f) The coincidence-reading of the micrometer-wire with the middle wire was 10".268. On April 9, it was 10".331. (g) At some wires without the dark glass. (h) Clouded at the last wires. (i) Cloudy. (k) No other near. (l) The companions to these very faint. (m) Cloudy and unsteady. (n) Much clouded. (o) The following of two: no others in the field. Σ 's R.A. is 1^m in excess. (p) Extremely faint.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.			
Apr. 17	(a) Σ 1812.	32,4	47,8	3,1	18,8	34,3	49,6	14. 6. 5,1	5. 18,73	19,00		0,99	14. 5. 32,70	G.		
	Arcturus.	39,0	53,3	7,5	22,0	36,2	50,5	14. 9. 5,0	8. 21,94	22,25	13,64		14. 8. 35,95	G.		
	α^2 Libræ.	22,7	36,5	50,2	4,5	18,6	32,4	14. 42. 46,3	42. 4,46	5,00	13,88		14. 42. 18,73	G.		
Apr. 18	(b) Σ 1397.	56,3	11,0	26,0	41,2	56,0	10,9	9. 48. 26,0	47. 41,06	41,35		0,97	9. 47. 55,83	G.		
	(c) Σ_2 210.	32,7	52,5	12,0	32,1	52,0	11,7	9. 53. 31,8	52. 32,11	32,25			9. 52. 46,73	G.		
	(d) Σ 1404. <i>np.</i>	26,9	40,3	54,0	8,0	21,0	34,2	9. 56. 48,1	56. 7,50	7,93			9. 56. 22,41	G.		
	Regulus.	9,9	23,6	37,2	51,2	5,1	19,0	10. 0. 32,7	59. 51,25	51,59	14,55		10. 0. 6,08	G.		
	(e) Σ_2 213.	20,5	36,0	51,1	6,4	21,9	37,1	10. 4. 52,4	4. 6,49	6,76			10. 4. 21,25	G.		
	β Leonis.	12,1	26,1	39,9	54,1	8,1	22,0	11. 41. 36,1	40. 54,07	54,39	14,47		11. 41. 8,94	G.		
	(f) Polaris SP.				20,0	54,0	16,2	13. 27. 46,8	2. 21,60	29,75			1. 2. 44,36	G.		
	Arcturus.	38,1	52,3	6,4	21,1	35,2	49,6	14. 9. 4,0	8. 20,96	21,26	14,64		14. 8. 35,91	G.		
	ϵ Bootis.	12,9	28,0	43,1	58,5	13,8	28,9	14. 38. 44,2	37. 58,49	58,76	14,70		14. 38. 13,43	G.		
Apr. 19	(g) \odot 1 L.		57,3	11,0	25,0	38,8	....	1. 48.	48. 24,90	25,25			1. 48. 40,37	G.	
	\odot 2 L.		7,7	21,2	35,1	49,0	2,7	1. 51. 16,6	50. 35,14	35,49			1. 50. 50,61	G.		
Apr. 20	(h) Venus 1 L.	54,5	9,4	24,2	39,3	54,2	9,1	4. 51. 24,2	50. 39,27	39,57		1,02	4. 50. 55,84	G.		
Apr. 22	(i) Venus 1 L.	23,5	38,4	53,1	8,4	23,2	38,1	5. 0. 53,1	0. 8,26	8,56		1,04	5. 0. 26,91	G.		
	(k) Rigel.	4,9	18,2	31,6	45,5	59,0	12,6	5. 7. 26,2	6. 45,43	45,94	18,45		5. 7. 4,29	G.		
	(l) Spica.		15,9	29,1	43,0	56,7	....	13. 16.	16. 43,01	43,53	18,65		13. 17. 2,24	G.	
	Arcturus.	33,9	48,1	2,3	16,9	31,3	45,5	14. 8. 59,9	8. 16,84	17,16	18,77		14. 8. 35,90	G.		
	ϵ Bootis.	9,0	24,1	39,1	54,6	9,8	25,0	14. 38. 40,1	37. 54,54	54,82	18,68		14. 38. 13,58	G.		
	α Andromedæ.	15,6	31,0	46,0	1,4	16,7	32,0	0. 0. 47,2	0. 1,42	1,70	19,23	1,05	0. 0. 20,87	G.		
	Polaris.	12,2	42,0	3,0	37,8	7,8	33,6	1. 28. 2,2	2. 36,94	28,82			1. 2. 48,03	G.		
	Polaris M.	30,2	11,4	54,0	37,8	22,2	5,0	1. 4. 47,0	2. 35,69	27,57			1. 2. 46,78	G.		
Apr. 23	\odot 1 L.	36,0	49,9	3,4	17,2	31,1	44,9	2. 3. 58,9	3. 17,34	17,70			2. 3. 36,96	G.		
	\odot 2 L.	46,5	0,4	14,2	28,1	42,1	56,0	2. 6. 9,7	5. 28,15	28,51			2. 5. 47,77	G.		
	Mercury 1 L.	24,6	39,0	53,1	7,9	22,1	36,5	3. 6. 50,9	6. 7,73	8,06			3. 6. 27,37	G.		
	Aldebaran.	57,8	11,9	25,6	39,9	53,9	7,9	4. 27. 22,0	26. 39,86	40,20	19,34		4. 26. 59,56	G.		
	(m) Venus 1 L.	7,3	22,4	37,2	52,5	7,4	22,4	5. 5. 37,4	4. 52,38	52,68			5. 5. 12,07	G.		
	β Tauri.	21,6	37,0	52,2	7,9	23,2	38,4	5. 16. 53,6	16. 7,70	7,98	19,42		5. 16. 27,38	G.		
	η Geminorum.	25,6	40,1	54,5	9,4	24,0	38,5	6. 5. 53,0	5. 9,87	10,19			6. 5. 29,63	G.		
	μ Geminorum.	29,2	44,0	58,4	13,1	27,5	42,3	6. 13. 56,8	13. 13,05	13,37			6. 13. 32,81	G.		
	ν 1 L.	59,5	14,2	29,0	44,0	58,8	13,4	6. 37. 28,2	36. 43,88	44,20			6. 37. 3,66	G.		
	ζ Geminorum.			18,8	33,2	47,7	2,0	6. 55. 16,4	54. 33,22	33,53			6. 54. 53,00	G.		
	δ Geminorum.	46,2	1,0	15,4	30,1	44,7	59,2	7. 11. 13,8	10. 30,06	30,37			7. 10. 49,85	G.		
	Procyon.	9,1	22,7	36,1	49,9	3,4	16,9	7. 31. 30,4	30. 49,79	50,20	19,46		7. 31. 9,70	G.		
	Pollux.	42,0	57,2	12,5	28,1	43,3	58,5	7. 36. 13,8	35. 27,92	28,20	19,47		7. 35. 47,70	G.		
	(n) Σ 1445.	46,7	0,2	13,6	27,3	40,8	54,1	10. 25. 7,8	24. 27,22	27,67			10. 24. 47,30	G.		
	B.A.C. 3649.	33,4	47,0	0,6	14,4	28,1	41,5	10. 31. 55,4	31. 14,34	14,72			10. 31. 34,35	G.		
	(o) Σ 1465.		6,4	25,2	45,1	4,0	23,1	10. 34. 42,6	33. 44,81	44,97			10. 34. 4,60	G.		
	(p) Σ 1470.	22,1	35,6	48,9	2,8	16,4	29,6	10. 38. 43,1	38. 2,65	3,13			10. 38. 22,76	G.		
	Polaris SP.	53,8	21,7	48,0	15,2	50,6	13,6	13. 27. 43,7	2. 18,09	26,89			1. 2. 46,63	G.		
	Polaris SP. M.	8,8	51,4	35,0	15,2	0,0	44,2	13. 4. 27,8	2. 20,03	28,83			1. 2. 48,57	G.		
	Spica.	0,8	14,5	28,0	42,1	55,6	9,1	13. 17. 23,0	16. 41,88	42,40	19,79		13. 17. 2,15	G.		
	(q) Polaris.		43,6	5,0	....	....	....	1. 28. 3,4	2. 37,90	29,78		0,92	1. 2. 49,96	G.
Apr. 24	\odot 1 L.	20,0	33,9	47,5	1,6	15,4	29,2	2. 7. 43,1	7. 1,54	1,90			2. 7. 22,12	G.		
	\odot 2 L.	30,9	44,9	58,6	12,6	26,4	40,2	2. 9. 54,1	9. 12,54	12,90			2. 9. 33,12	G.		
	(r) Mercury 1 L.	24,6	39,0	53,1	7,8	22,1	36,5	3. 13. 51,0	13. 7,73	8,05			3. 13. 28,31	G.		
	Aldebaran.	56,8	10,9	24,8	39,0	53,0	7,0	4. 27. 21,1	26. 38,95	39,29	20,25		4. 26. 59,60	G.		
	(s) Rigel.	1,7	15,4	28,8	42,5	....	9,9	5. 7. 23,4	6. 42,56	43,07	20,33		5. 7. 3,41	G.	
	Venus 1 L.	51,1	6,1	21,0	36,4	51,2	6,1	5. 10. 21,1	9. 36,15	36,45			5. 9. 56,79	G.		
	β Tauri.	20,7	36,0	51,3	6,8	22,1	37,4	5. 16. 52,7	16. 6,72	7,00	20,39		5. 16. 27,34	G.		
	α Orionis.	43,3	57,0	10,4	24,1	37,7	51,3	5. 47. 4,9	46. 24,10	24,48	20,38		5. 46. 44,84	G.		
	ζ Geminorum.	48,9	3,2	17,5	32,2	46,5	0,9	6. 55. 15,4	54. 32,09	32,40			6. 54. 52,80	G.		
	δ Geminorum.	45,4	0,0	14,4	29,1	43,7	58,1	7. 11. 12,7	10. 29,06	29,37			7. 10. 49,79	G.		
	ν 1 L.	58,9	13,6	27,9	42,6	57,0	11,6	7. 30. 26,1	29. 42,54	42,87			7. 30. 3,30	G.		

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",95. LEVEL Error = - 0",81. From April 18 = - 0",95. AZIMUTH Error = + 6",68. From April 20 = + 7",09.

(a) Clouds passing. (b) Very faint: no other near. Is this star variable? (c) Observed as single. (d) Very faint. This is B. ix. 1227. (e) No other near. (f) Unsteady. (g) Much clouded. (h) Rather cloudy. (i) Often cloudy. (k) After this observation the eye-end of the telescope was slightly struck. The observation has been increased 1". (l) Extremely cloudy. (m) Unsteady. (n) Very faint: quite alone. (o) No other near: faint. (p) A very faint star preceded this about 20°. (q) Extremely faint: not used for Azimuth Error. (r) Great motion. (s) Clouds passing.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Apr. 24	Pollux.....	41,0	56,3	11,5	27,0	42,4	57,5	7	36	12,9	35	26,95	27,23	20,43	0,92	7	35	47,66	G.
	(a) Σ 1426.....	23,1	36,7	50,1	3,9	17,5	31,0	10	12	44,5	12	3,83	4,22			10	12	24,75	G.
	(b) Σ_2 218.....	27,5	41,0	54,3	8,0	21,5	35,0	10	19	48,5	19	7,97	8,39			10	19	28,92	G.
	(c) Σ 1445.....	45,8	59,3	12,5	26,5	39,9	53,2	10	25	6,7	24	26,27	26,72			10	24	47,26	G.
	B.A.C. 3649.....	32,4	46,1	59,6	13,4	27,2	40,8	10	31	54,5	31	13,44	13,82			10	31	34,36	G.
	(c) Σ 1465.....	46,2	5,3	24,2	43,7	3,1	22,1	10	34	41,5	33	43,73	43,89			10	34	4,43	G.
	(c) Σ 1470.....	21,1	34,7	48,1	1,7	15,1	28,7	10	38	42,1	38	1,65	2,13			10	38	22,68	G.
	δ Ophiuchi.....	12,0	25,5	38,9	52,5	6,0	19,4	16	6	33,0	5	52,48	52,94	20,75		16	6	13,70	G.
	Pallas.....	3,9	18,5	33,0	47,9	2,4	16,9	16	12	31,4	11	47,72	48,03			16	12	8,79	G.
	α Andromedæ.....	13,6	28,9	44,0	59,6	15,0	30,1	0	0	45,4	59	59,52	59,80	21,18	0,88	0	0	20,87	G.
	\odot 2 L.....				57,4	11,4	25,3	2	13	39,2	12	57,49	57,85			2	13	19,00	G.
Apr. 25	(d) Mercury 1 L.....	13,3	27,9	42,0	56,7	11,3	25,5	3	20	40,0	19	56,67	56,98			3	20	18,17	G.
	Rigel.....	0,7	14,5	27,9	41,8	55,3	8,9	5	7	22,6	6	41,68	42,19	21,20		5	7	3,45	G.
	(e) Venus 1 L.....	34,2	49,5	4,3	19,6	34,6	49,4	5	15	4,5	14	19,45	19,75			5	14	41,01	G.
	(e) β Tauri.....				5,8	21,2	36,5	5	16	51,7	16	5,80	6,08	21,30		5	16	27,34	G.
	α Orionis.....	42,5	56,1	9,4	23,4	36,8	50,4	5	47	4,0	46	23,24	23,62	21,23		5	46	44,90	G.
	Procyon.....	7,3	20,9	34,3	48,0	1,4	15,0	7	31	28,5	30	47,92	48,33	21,30		7	31	9,67	G.
	Pollux.....	40,1	55,4	10,5	26,1	41,5	56,6	7	36	12,0	35	26,03	26,31	21,35		7	35	47,66	G.
	γ 1 L.....	25,7	40,0	54,0	8,5	22,9	37,0	8	22	5,4	22	8,50	8,85			8	22	30,23	G.
	δ Cancri.....	46,4	0,8	14,9	29,2	43,5	57,7	8	36	11,9	35	29,20	29,53			8	35	50,92	G.
	Piazzi X. 179. <i>sf.</i>	2,4	16,1	29,5	43,4	56,9	10,5	10	44	24,1	43	43,28	43,66			10	44	5,12	G.
	Σ 1496. <i>sf.</i>	4,5	18,4	32,1	46,2	0,1	14,0	10	50	27,8	49	46,16	46,51			10	50	7,98	G.
	Σ 1506.....	48,0	1,4	14,7	28,4	42,0	55,3	10	57	8,8	56	28,37	28,83			10	56	50,30	G.
	(f) Σ_2 231. <i>nf.</i>	23,9	39,6	55,1	11,2	27,0	42,8	11	2	58,3	2	11,13	11,39			11	2	32,87	G.
	Piazzi XI. 14.....	18,8	35,9	53,0	10,4	27,4	44,6	11	7	2,0	6	10,31	10,53			11	6	32,01	G.
	Σ 1534.....	37,0	51,3	5,4	20,0	34,1	48,4	11	14	2,5	13	19,32	20,15			11	13	41,63	G.
	δ Ophiuchi.....	11,1	24,7	38,1	51,9	5,1	18,8	16	6	32,1	5	51,69	52,15	21,56		16	6	13,81	G.
	Pallas.....	24,9	39,4	53,9	8,6	23,1	37,9	16	11	52,4	11	8,60	8,92			16	11	30,58	G.
	Ceres.....	44,9	58,8	12,5	26,5	40,4	54,2	16	17	8,1	16	26,49	27,04			16	16	48,71	G.
	Antares.....	47,5	2,4	17,1	32,5	47,3	2,2	16	20	17,3	19	32,34	32,99	21,76		16	19	54,66	G.
Apr. 26	(g) \odot 1 L.....	49,7	3,9	17,4	31,7	45,4	59,3	2	15	13,2	14	31,52	31,91		0,94	2	14	53,90	G.
	\odot 2 L.....	1,2	15,2	29,0	43,1	56,9	10,5	2	17	24,5	16	42,92	43,31			2	17	5,30	G.
	(h) Mercury 1 L.....	50,0	4,2	19,0	33,5	48,1	2,6	3	27	17,1	26	33,51	33,85			3	26	55,89	G.
	Aldebaran.....	54,9	8,9	22,9	37,0	51,0	5,1	4	27	19,1	26	36,99	37,36	22,17		4	26	59,43	G.
	Rigel.....	0,0	13,5	27,0	40,9	54,5	8,0	5	7	21,6	6	40,79	41,37	22,02		5	7	3,47	G.
	β Tauri.....	18,9	34,2	49,5	5,1	20,4	35,5	5	16	51,1	16	4,96	5,26	22,12		5	16	27,37	G.
	Venus 1 L.....	17,2	32,1	47,0	2,3	17,3	32,1	5	19	47,5	19	2,22	2,53			5	19	24,64	G.
	α Orionis.....			8,6	22,3	35,9	49,5	5	47	3,2	46	22,33	22,76	22,08		5	46	44,89	G.
	α Andromedæ.....	11,9	27,1	42,2	57,7	13,1	28,3	0	0	43,6	59	57,70	58,00	23,02	1,03	0	0	20,92	G.
	\odot 1 L.....	35,3	49,4	3,0	17,2	31,1	45,0	2	18	58,9	18	17,13	17,52			2	18	40,54	G.
Apr. 27	\odot 2 L.....	47,0	0,8	14,7	28,6	42,4	56,5	2	21	10,4	20	28,63	29,02			2	20	52,04	G.
	(h) Mercury 1 L.....	14,0	28,6	43,0	57,6	12,1	26,7	3	33	41,3	32	57,62	57,96			3	33	21,03	G.
	Aldebaran.....	53,9	8,0	22,1	36,1	50,3	4,2	4	27	18,3	26	36,13	36,50	23,03		4	26	59,61	G.
	Venus 1 L.....	59,1	14,1	29,0	44,5	59,3	14,2	5	24	29,5	23	44,25	44,56			5	24	7,71	G.
	π Leonis.....	55,9	9,4	23,1	36,8	50,3	3,9	9	52	17,5	51	36,70	37,13			9	52	0,47	G.
	Regulus.....	1,1	14,9	28,3	42,3	56,3	9,9	10	0	23,8	59	42,38	42,77	23,26		10	0	6,12	G.
	γ 1 L.....	41,1	55,0	8,8	22,7	36,6	50,4	10	7	4,3	6	22,71	23,17			10	6	46,52	G.
	Σ 1426.....	20,1	33,8	47,2	1,0	14,6	28,0	10	12	41,7	12	0,92	1,36			10	12	24,72	G.
	Σ_2 218.....	24,4	38,1	51,4	5,1	18,6	32,1	10	19	45,6	19	5,04	5,52			10	19	28,89	G.
	ρ Leonis.....	33,3	47,0	0,5	14,4	28,1	41,8	10	24	55,5	24	14,37	14,80			10	24	38,17	G.
	B.A.C. 3649.....	29,5	43,4	56,7	10,6	24,2	38,0	10	31	51,5	31	10,56	10,99			10	31	34,36	G.
	Σ 1465.....	43,2	2,5	21,2	41,1	0,2	19,2	10	34	38,2	33	40,81	40,93			10	34	4,30	G.
	Σ 1470.....	18,3	31,9	45,2	59,0	12,3	25,9	10	38	39,5	37	58,87	59,42			10	38	22,80	G.
	(i) Piazzi X. 179. <i>sf.</i>	0,7	14,0	27,4	41,4	55,1	8,5	10	44	22,1	43	41,32	41,75			10	44	5,13	G.
	Σ 1496.....	2,6	16,4	30,0	44,2	58,1	12,0	10	50	25,9	49	44,17	44,66			10	50	8,04	G.
	d Leonis.....	28,4	42,0	55,3	9,0	22,6	36,1	10	52	49,5	52	8,99	9,47			10	52	32,86	G.
	β Leonis.....	3,1	17,1	30,9	45,1	59,1	13,0	11	41	27,0	40	45,04	45,41	23,39		11	41	8,83	G.
	Spica.....	57,1	10,8	24,1	38,1	51,9	5,4	13	17	19,1	16	38,07	38,67	23,52		13	17	2,16	G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",95. LEVEL Error = - 0",95. From April 26 = - 1",44. AZIMUTH Error = + 7",09. From April 26 = + 8",60.

(a) Observed as single: no star near. (b) Quite alone. (c) All faint, especially the two first. (d) An insect on the field-glass annoyed the observer. (e) Great noise in the north court. (f) The observation has been diminished 1^m: see April 1 and April 29. (g) Bad definition. (h) Unsteady. (i) Bad definition and unsteadiness. (k) Very faint. (l) Faint from haze.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Apr. 27	Pallas	3,0	17,9	32,0	47,0	1,6	16,1	16	10	30,8	9	46,92	47,26		1,03	16	10	10,87	G.
	Ceres	22,9	36,9	50,5	4,6	18,5	32,2	16	15	46,1	15	4,53	5,16			16	15	28,78	G.
	Antares	45,3	0,4	15,2	30,5	45,4	0,4	16	20	15,3	19	30,36	31,11	23,69		16	19	54,73	G.
Apr. 28	(a) Polaris M.	26,5	8,8	51,4	36,6	19,6	4,0	1	4	44,4	2	33,36	22,01		1,00	1	2	47,00	G.
Apr. 29	(b) ☉ 1 L.	7,8	22,0	35,8	50,0	3,9	17,6	2	26	31,6	25	49,82	50,20			2	26	15,25	G.
	☉ 2 L.	19,9	33,7	47,8	1,4	15,5	29,5	2	28	43,4	28	1,61	1,99			2	28	27,04	G.
	Mercury 1 L.	19,3	34,0	48,6	3,4	18,0	32,5	3	45	47,1	45	3,28	3,62		25,11	3	45	28,73	G.
	Aldebaran.	52,0	6,0	19,9	34,1	48,0	2,1	4	27	16,1	26	34,04	34,41	25,11		4	26	59,55	G.
	(a) Rigel	56,8	10,5	23,9	37,6	51,2	5,0	5	7	18,4	6	37,63	38,21	25,15		5	7	3,37	G.
	β Tauri	15,8	31,2	46,3	2,0	17,2	32,4	5	16	47,9	16	1,84	2,14	25,21	25,37	5	16	27,31	G.
	Venus 1 L.	20,3	35,4	50,3	5,7	20,8	35,8	5	33	50,8	33	5,59	5,90			5	33	31,09	G.
	(c) Σ 1445.	41,1	54,6	7,8	21,4	35,0	48,3	10	25	1,7	24	21,42	21,93			10	24	47,31	G.
	Σ 228.	42,0	56,7	11,1	26,0	40,6	55,1	10	39	10,0	38	25,93	26,27		25,56	10	38	51,66	G.
	(d) Piazzì X. 179. sf.	58,6	12,1	25,5	39,4	53,1	6,6	10	44	20,1	43	39,35	39,78			10	44	5,18	G.
	Σ 1496.	0,6	14,3	28,2	42,4	56,1	10,1	10	50	24,0	49	42,25	42,64			10	50	8,04	G.
	(e) Σ 1501.	34,6	50,3	6,1	22,0	38,0	53,7	10	54	9,4	53	22,02	22,27		25,50	10	53	47,67	G.
	Σ 1506.	44,0	57,4	10,9	24,4	38,1	51,4	10	57	5,0	56	24,46	24,99			10	56	50,40	G.
	(f) Σ 231. nf.	19,7	35,6	51,2	7,1	23,0	38,5	11	2	54,5	2	7,09	7,36			11	2	32,77	G.
	Piazzì XI. 14.	14,9	31,9	49,0	6,4	23,5	40,7	11	6	58,1	6	6,36	6,57		25,57	11	6	31,98	G.
	σ Leonis	1,8	15,2	28,9	42,4	56,1	9,5	11	13	23,0	12	42,42	42,86			11	13	8,28	G.
	(g) Σ 1535.	50,6	4,1	17,5	31,2	44,8	58,3	11	15	12,0	14	31,22	31,71			11	14	57,13	G.
	(g) Σ 234.	5,2	23,1	41,3	59,9	18,1	36,1	11	22	54,2	21	59,70	59,87		25,77	11	22	25,29	G.
	ν Leonis	54,2	7,9	21,1	34,8	48,3	1,3	11	29	15,1	28	34,67	35,18			11	29	0,61	G.
	β Leonis	1,1	15,1	29,0	43,1	57,0	11,0	11	41	25,0	40	43,05	43,42	25,37	0,83	11	41	8,86	G.
	(e) Σ 1576. nf.	37,4	53,4	8,8	25,1	40,8	56,7	11	45	12,4	44	24,94	25,19			11	44	50,63	G.
	η 1 L.	36,6	50,5	4,1	18,4	32,2	46,1	11	55	0,0	54	18,28	18,85			11	54	44,30	G.
	(h) η Virginis. ....	...	...	...	32,7	46,2	59,5	12	12	13,1	11	32,64	33,15		25,90	12	11	58,61	G.
	γ Virginis.	40,1	54,0	7,4	21,1	34,8	48,2	12	26	2,0	25	21,09	21,67			12	25	47,14	G.
	(i) Polaris SP. M. ...	59,0	42,4	23,8	8,6	51,0	33,0	13	4	15,8	2	10,20	22,36			1	2	47,85	G.
	Spica	55,0	8,7	22,1	36,1	49,9	3,5	13	17	17,0	16	36,04	36,64	25,56	25,90	13	17	2,15	G.
	δ Ophiuchi.	7,2	20,8	34,0	47,8	1,2	14,9	16	6	28,3	5	47,75	48,28	25,50		16	6	13,90	G.
	Pallas	37,6	52,2	6,7	21,5	36,4	51,0	16	9	5,6	8	21,58	21,92			16	8	47,54	G.
	Ceres	56,0	10,0	23,8	37,8	51,7	5,4	16	14	19,3	13	37,72	38,35		25,77	16	14	3,98	G.
	Antares	43,4	58,3	13,2	28,4	43,3	58,3	16	20	13,4	19	28,33	29,08	25,77		16	19	54,71	G.
	α Andromedæ	9,0	24,2	39,5	55,1	10,2	25,4	0	0	40,8	59	54,89	55,19	25,90	0,90	0	0	21,02	G.
	Polaris M.	27,2	10,2	53,8	37,4	21,0	2,6	1	4	44,3	2	34,10	22,75			1	2	48,61	G.
Apr. 30	(k) ☉ 1 L.	55,1	9,1	22,9	37,1	51,0	5,0	2	30	19,1	29	37,04	37,42		25,93	2	30	3,34	G.
	☉ 2 L.	7,1	21,1	34,9	49,1	3,0	17,0	2	32	31,0	31	49,03	49,41			2	32	15,33	G.
	Mercury 1 L.	59,7	14,4	28,9	43,8	58,4	13,1	3	51	27,8	50	43,74	44,08			3	51	10,04	G.
	Rigel	56,0	9,5	23,0	36,9	50,6	4,2	5	7	17,7	6	36,84	37,42	25,93	25,93	5	7	3,43	G.
	Venus 1 L.	0,0	14,9	29,9	45,1	0,4	15,2	5	38	30,2	37	45,10	45,41			5	38	11,43	G.
	η Virginis	51,4	5,1	18,4	32,0	45,4	59,0	12	12	12,2	11	31,94	32,45			12	11	58,70	G.
	γ Virginis.	39,5	53,1	6,5	20,4	34,0	47,5	12	26	1,3	25	20,33	20,91		26,33	12	25	47,17	G.
	η 1 L.	13,1	27,3	41,4	55,9	10,0	24,0	12	52	38,0	51	55,67	56,27			12	52	22,54	G.
	Arcturus	26,3	40,6	54,9	9,3	23,8	38,0	14	8	52,1	8	9,29	9,64	26,33	26,46	14	8	35,96	G.
	α Coronæ Borealis.	56,0	11,1	26,1	41,3	56,5	11,6	15	28	26,8	27	41,35	41,66	26,46		15	28	8,02	G.
	Pallas	53,3	8,2	23,0	37,8	52,4	7,1	16	8	21,9	7	37,67	38,00			16	8	4,39	G.
	Ceres	11,1	25,1	38,8	53,0	6,9	20,5	16	13	34,4	12	52,84	53,47		26,30	16	13	19,86	G.
	Antares	42,7	57,9	12,4	27,9	43,0	58,0	16	20	12,8	19	27,82	28,57	26,30		16	19	54,96	G.
	α Andromedæ. ...	8,2	23,4	38,5	54,0	9,4	24,7	0	0	40,0	59	54,04	54,34	26,77	0,90	0	0	21,03	G.
May 1	(l) ☉ 1 L.	42,8	56,6	10,7	24,9	39,0	53,0	2	34	6,7	33	24,81	25,19			2	33	51,98	G.
	☉ 2 L.	55,0	9,0	22,5	36,9	51,0	5,1	2	36	19,1	35	36,94	37,32			2	36	4,11	G.
	Mercury 1 L.	24,0	38,8	53,2	8,2	22,9	37,7	3	56	...	56	8,14	8,48		26,86	3	56	35,32	G.
	Aldebaran.	50,3	4,3	18,1	32,4	46,4	0,2	4	27	14,2	26	32,28	32,65	26,86		4	26	59,51	G.
	Rigel	55,0	8,8	22,1	36,0	49,6	3,2	5	7	16,8	6	35,93	36,51	26,84		5	7	3,39	G.
	Venus 1 L.	38,0	53,6	8,4	23,7	38,7	53,7	5	43	8,9	42	23,58	23,89		26,84	5	42	50,79	G.
	α Orionis.	36,6	50,4	3,9	17,6	31,1	44,8	5	46	58,2	46	17,52	17,95			5	46	44,86	G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",95. LEVEL Error = - 1",44. AZIMUTH Error = + 8",60.

(a) Unsteady. (b) 'Very bad.' (c) Very faint. (d) This is the larger by at least half a magnitude. (e) Faint.
 A star of equal magnitude precedes about 20". (f) The companion was faint. (g) No other near. (h) Wires
 lost by taking a wrong star. (i) Indefinite. (k) Badly defined. (l) Much fringed.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
May 1	β Leonis.....	.....	.....	27,2	41,2	55,4	9,2	11.41.	23,1		40.41,24		41,61	27,16	0,90	11.41.	8,74		G.
	Spica.....	53,4	7,0	20,5	34,4	48,2	1,9	13.17.	15,6		16.34,43		35,03	27,17		13.17.	2,22		G.
	(a) B.A.C. 4530. sp...	14,2	27,8	41,1	54,9	8,4	21,8	13.26.	35,2		25.54,77		55,28			13.26.	22,47		G.
	(a) Σ 1781. sp.....	11,7	25,4	39,0	52,4	6,1	19,5	13.38.	33,2		37.52,48		52,92			13.38.	20,12		G.
	α Virginis.....	17,5	31,7	45,5	0,0	14,0	28,1	13.41.	42,3		40.59,88		0,55			13.41.	27,75		G.
	Σ 271.....	10,2	23,9	37,3	51,2	5,0	18,6	13.46.	32,4		45.51,24		51,66			13.46.	18,87		G.
	) 1 L.....	16,8	31,2	45,4	0,2	14,8	29,1	13.53.	43,9		53.0,21		0,86			13.53.	28,07		G.
	λ Virginis.....	34,8	48,7	2,3	16,2	30,1	43,8	14.10.	57,5		10.16,20		16,81			14.10.	44,03		G.
	α^2 Libræ.....	9,2	23,2	37,0	51,2	5,0	19,2	14.42.	33,0		41.51,12		51,76	27,28		14.42.	19,00		G.
	Pallas.....	8,6	23,4	37,9	53,0	7,5	22,2	16.7.	37,0		6.52,81		53,14			16.7.	20,43		G.
	Ceres.....	25,1	39,0	52,9	6,8	20,8	34,3	16.12.	48,4		12.6,76		7,39			16.12.	34,69		G.
May 2	☉ 1 L.....	30,9	45,0	58,9	13,2	27,1	41,1	2.37.	55,2		37.13,07		13,45		0,95	2.37.	41,14		G.
	☉ 2 L.....	43,2	57,2	11,2	25,3	39,3	53,4	2.40.	7,4		39.25,29		25,67			2.39.	53,36		G.
	Mercury 1 L.....	31,9	46,5	1,1	16,0	30,8	45,5	4.2.	0,2		1.16,00		16,34			4.1.	44,09		G.
	Aldebaran.....	49,2	3,4	17,3	31,4	45,4	59,3	4.27.	13,4		26.31,35		31,72	27,79		4.26.	59,49		G.
	Rigel.....	54,1	7,8	21,2	35,0	48,8	2,1	5.7.	15,7		6.34,96		35,54	27,80		5.7.	3,33		G.
	(b) β Tauri.....	13,1	28,6	43,8	59,3	14,4	29,7	5.16.	45,1		15.59,15		59,45	27,88		5.16.	27,25		G.
	Venus 1 L.....	15,5	30,8	45,7	1,1	16,1	31,1	5.47.	46,2		47.0,94		1,25			5.47.	29,07		G.
	λ Virginis.....	33,9	47,7	1,4	15,3	29,3	43,0	14.10.	56,8		10.15,34		15,95			14.10.	44,10		G.
	ϵ Bootis.....	59,3	15,0	29,8	45,1	0,4	15,5	14.38.	30,6		37.45,10		45,40	28,17		14.38.	13,57		G.
	α^2 Libræ.....	8,4	22,3	36,1	50,4	4,3	18,2	14.42.	32,1		41.50,26		50,90	28,15		14.42.	19,07		G.
	) 2 L.....	20,3	35,2	50,0	5,1	20,0	34,5	15.0.	49,5		0.4,94		5,63			15.0.	33,81		G.
	δ Scorpii.....	58,2	12,8	27,1	42,1	56,4	11,1	15.51.	25,7		50.41,92		42,63			15.51.	10,85		G.
	β^1 Scorpii.....	14,2	28,7	42,8	57,4	11,5	25,9	15.56.	40,1		55.57,23		57,92	28,20		15.56.	26,14		G.
	Ceres.....	37,5	51,4	5,2	19,1	33,2	47,1	16.12.	1,0		11.19,22		19,85			16.11.	48,08		G.
	Antares.....	41,2	56,1	10,8	26,1	41,1	55,8	16.20.	11,0		19.26,02		26,77	28,14		16.19.	55,01		G.
May 3	☉ 1 L.....	20,0	34,0	47,9	2,0	16,0	30,0	2.41.	44,1		41.2,01		2,40		0,97	2.41.	31,06		G.
	☉ 2 L.....	32,1	46,2	0,2	14,3	28,4	42,4	2.43.	56,3		43.14,27		14,66			2.43.	43,32		G.
	Mercury 1 L.....	22,2	37,1	51,8	6,9	21,4	36,2	4.6.	50,9		6.6,65		7,00			4.6.	35,72		G.
	Aldebaran.....	48,2	2,4	16,2	30,4	44,5	58,4	4.27.	12,5		26.30,38		30,77	28,74					G.
	(c) Rigel.....	53,2	7,0	20,3	34,0	47,5	1,1	5.7.	15,0		6.34,01		34,60	28,74					G.
May 4	(c) Venus 1 L.....	.....	.....	.....	37,1	52,2	7,0	5.52.	22,3		51.36,98		37,31			5.52.	6,10		G.
	(c) Venus 1 L.....	26,7	41,9	56,6	12,0	27,2	42,1	5.56.	57,2		56.11,96		12,27			5.56.	42,03		G.
May 6	(c) Venus 1 L.....	32,0	47,0	1,8	.....	.....	.....	6.5.	.....		5.17,16		17,47		1,00	6.5.	49,25		G.
	Polaris SP. M. ...	3,8	43,8	22,2	3,0	49,2	35,0	13.4.	15,4		2.10,03		20,71			1.2.	52,78		G.
	Spica.....	48,4	2,1	15,8	29,7	43,2	56,9	13.17.	10,7		16.29,55		30,11	32,09		13.17.	2,19		G.
	Arcturus.....	20,7	35,1	49,1	3,6	17,9	32,0	14.8.	46,2		8.3,52		3,87	32,11		14.8.	35,99		G.
	ϵ Bootis.....	55,4	10,7	25,9	41,2	56,4	11,6	14.38.	26,8		37.41,15		41,45	32,14		14.38.	13,59		G.
	α^2 Libræ.....	4,5	18,4	32,3	46,4	0,4	14,0	14.42.	28,2		41.46,32		46,94	32,14		14.42.	19,08		G.
	Ceres.....	18,1	32,1	45,9	0,0	14,0	.....	16.8.	.....		7.59,90		0,51			16.8.	32,71		G.
	(d) Polaris M.....	23,8	6,0	48,6	34,2	17,4	57,2	1.4.	43,0		2.30,35		20,43			1.2.	53,00		G.
May 7	☉ 1 L.....	40,2	54,3	8,3	22,8	36,6	51,0	2.57.	5,0		56.22,61		22,98			2.56.	55,63		G.
	☉ 2 L.....	53,2	7,4	21,1	35,8	50,0	4,1	2.59.	18,1		58.35,67		36,04			2.59.	8,69		G.
May 8	(e) ☉ 1 L.....	31,7	45,9	0,0	14,2	28,4	42,7	3.0.	56,9		0.14,26		14,63		1,06	3.0.	48,27		G.
	☉ 2 L.....	44,9	59,0	13,1	27,3	41,5	55,6	3.3.	9,9		2.27,33		27,70			3.3.	1,34		G.
	(d) Procyon.....	54,7	8,1	21,5	35,2	49,0	2,4	7.31.	15,8		30.35,24		35,68	33,78		7.31.	9,52		G.
	Pollux.....	27,3	42,5	57,8	13,2	28,6	43,8	7.35.	59,1		35.13,19		13,49	33,86		7.35.	47,34		G.
	Spica.....	46,4	0,0	13,6	27,6	41,2	54,9	13.17.	8,6		16.27,47		28,04	34,16		13.17.	2,14		G.
	(f) B. XIII. 375.....	32,5	46,1	59,6	13,4	26,9	40,4	13.22.	54,0		22.13,28		13,83			13.22.	47,93		G.
	(c) m Virginis.....	13,7	27,2	40,7	54,7	8,1	21,6	13.33.	35,3		32.54,47		55,02			13.33.	29,13		G.
	(c) B.A.C. 4591.....	46,9	0,5	13,9	27,9	41,5	55,1	13.39.	8,9		38.27,82		28,37			13.39.	2,48		G.
	(g) Σ 1804. sp.....	43,7	58,1	12,3	27,2	41,8	56,2	14.1.	10,9		0.27,17		27,51			14.1.	1,64		G.
	(h) Σ 1825. n.....	3,1	17,2	31,5	46,2	0,9	15,2	14.9.	29,5		8.46,23		46,57			14.9.	20,70		G.
May 10	(i) Polaris SP. M. ...	57,0	40,0	22,6	4,8	50,2	34,6	13.4.	14,8		2.8,83		18,91		1,17	1.2.	55,35		G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",95. LEVEL Error = - 1",44. From May 3 = - 1",14. From May 10 = - 1",18. AZIMUTH Error = + 8",60. From May 4 = + 8",04. From May 10 = + 7",61.

(a) Components close. (b) Faint and unsteady. (c) Cloudy. (d) Unsteady. (e) Several wires of each Limb without the dark glass. (f) Quite alone. (g) Faint. (h) The two stars have nearly the same R.A. (i) The coincidence-reading of the micrometer on this day was 10',155 for Polaris SP., and 10',207 for Polaris. A like excess was found in several other instances.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.						
May 10	Spica.....	44,1	57,9	11,4	25,2	39,1	52,5	13. 17. 6,3	16. 25,21	25,75	36,45	1,17	13. 17. 2,21	G.
	2 L.....	13,5	27,2	41,0	55,0	8,6	22,3	22. 53. 36,2	52. 54,83	55,31			22. 53. 32,23	G.
	α Pegasi.....	42,2	56,1	9,9	24,0	38,0	51,6	22. 57. 5,5	56. 23,91	24,27	36,95		22. 57. 1,20	G.
	α Andromedæ....	58,2	13,4	28,7	44,2	59,5	14,7	0. 0. 30,0	59. 44,11	44,40	36,97		0. 0. 21,38	G.
	Polaris.....	2,6	33,0	54,4	31,0	57,8	24,0	1. 27. 50,6	2. 27,63	18,27			1. 2. 55,30	G.
	Polaris M.....	21,8	4,2	46,8	31,0	15,0	57,6	1. 4. 39,2	2. 28,26	18,90			1. 2. 55,93	G.
May 11	(a) \odot 1 L.....	9,8	23,9	37,9	52,4	6,7	20,9	3. 12. 34,9	11. 52,36	52,70			3. 12. 29,84	G.
	\odot 2 L.....	23,3	37,4	51,5	5,9	20,2	34,1	3. 14. 48,4	14. 5,83	6,17			3. 14. 43,31	G.
May 13	(b) Mercury 1 L.....	15,4	30,2	44,9	59,7	14,4	29,2	4. 37. 43,6	36. 59,63	59,94		1,14	4. 37. 39,47	G.
	β Tauri.....	1,3	16,8	31,9	47,5	2,9	18,0	5. 16. 33,3	15. 47,39	47,68	39,62		5. 16. 27,24	G.
	α Hydræ.....	36,0	49,8	3,1	17,0	30,6	43,9	9. 19. 57,7	19. 16,87	17,39	39,75		9. 19. 57,14	G.
	Regulus.....	44,1	58,1	11,7	25,8	39,5	53,2	10. 0. 7,0	59. 25,63	26,00	39,81		10. 0. 5,79	G.
	β Leonis.....	46,5	0,5	14,4	28,6	42,7	56,5	11. 41. 10,5	40. 28,53	28,88	39,78		11. 41. 8,74	G.
	(c) Σ 1953. <i>nf.</i>	56,9	10,2	23,5	37,2	51,1	4,7	15. 25. 18,1	24. 37,39	37,80			15. 25. 17,84	G.
	α Coronæ Borealis.	42,3	57,5	12,6	28,0	43,2	58,2	15. 28. 13,3	27. 27,87	28,16	40,08		15. 28. 8,20	G.
	(d) α Serpentis.....	17,6	31,1	44,5	58,1	12,0	25,2	15. 36. 39,1	35. 58,23	58,64	39,99		15. 36. 38,69	G.
	Pallas.....	17,6	32,3	47,2	2,4	17,3	32,2	15. 57. 47,0	57. 2,29	2,59			15. 57. 42,66	G.
	Ceres.....	58,1	12,2	26,0	40,0	54,0	7,9	16. 2. 21,4	1. 39,95	40,53			16. 2. 20,60	G.
	(e) Σ 1898.	37,0	5,5	32,4	....	25,8	52,7	14. 53. 19,9	51. 58,90	58,82		1,13	14. 52. 39,95	G.
May 14	(f) Σ 1908.	12,2	28,7	44,9	1,8	18,1	34,3	14. 58. 51,0	58. 1,58	1,84			14. 58. 42,98	G.
	α Coronæ Borealis.	41,1	56,3	11,3	26,9	42,1	57,0	15. 28. 12,1	27. 26,69	27,02	41,22			G.
	α Serpentis.....	....	30,2	43,3	57,0	10,7	24,1	15. 36. 37,8	35. 57,07	57,53	41,11			G.
May 16	(g) \odot 1 L.....	44,3	59,0	12,9	27,2	41,8	56,0	3. 32. 10,2	31. 27,35	27,69		1,08	3. 32. 10,56	G.
	\odot 2 L.....	59,0	13,1	27,2	41,9	56,2	10,3	3. 34. 24,7	33. 41,78	42,12			3. 34. 24,99	G.
	α Coronæ Borealis.	39,1	54,2	9,1	24,7	39,8	54,8	15. 28. 10,0	27. 24,54	24,82	43,44		15. 28. 8,23	G.
	α Serpentis.....	....	27,9	41,1	54,9	8,4	21,8	15. 36. 35,4	35. 54,80	55,23	43,42		15. 36. 38,64	G.
	(h) Pallas.....	41,3	56,2	11,1	26,0	41,3	56,1	15. 55. 11,1	54. 26,16	26,46			15. 55. 9,89	G.
	(h) Ceres.....	7,4	21,5	35,1	49,2	3,1	16,9	15. 59. 30,8	58. 49,15	49,78			15. 59. 33,21	G.
	δ Ophiuchi.....	49,6	3,1	16,4	30,2	43,8	57,1	16. 6. 10,6	5. 30,12	30,64	43,39		16. 6. 14,07	G.
	(i) Antares.....	25,9	41,0	55,9	11,0	25,9	41,0	16. 19. 56,0	19. 10,96	11,70	43,46		16. 19. 55,14	G.
May 17	(k) Polaris SP. M. ...	45,8	32,0	16,0	55,4	40,0	25,2	13. 4. 14,6	2. 0,97	14,04		0,87	1. 2. 58,43	G.
	Σ 1733. <i>np.</i>	17,1	31,5	45,6	59,9	14,0	28,1	13. 8. 42,1	7. 59,76	0,11			13. 8. 44,51	G.
	(l) Spica.....	36,1	50,0	3,3	17,1	31,0	44,5	13. 16. 58,1	16. 17,16	17,74	44,45		13. 17. 2,14	G.
	(m) Σ 1760. <i>sp.</i>	37,5	52,7	8,0	22,8	38,0	53,1	13. 27. 8,6	26. 22,96	23,24			13. 27. 7,65	G.
	(n) Σ 1776. <i>sp.</i>	40,2	0,0	19,6	39,9	59,2	19,0	13. 35. 38,8	34. 39,53	39,60			13. 35. 24,01	G.
	(n) Σ 1783. ....	....	....	23,4	41,7	59,6	17,8	13. 39. 36,3	38. 41,69	41,82			13. 39. 26,23	G.
	Σ 1825. <i>nf.</i>	53,0	7,4	21,6	36,2	50,6	4,9	14. 9. 19,4	8. 36,16	36,48			14. 9. 20,91	G.
	(o) Σ 1870.	53,3	6,4	20,2	34,1	47,8	1,2	14. 35. 14,9	34. 33,99	34,41			14. 35. 18,86	G.
	ϵ Bootis.....	....	58,6	13,6	29,1	44,2	59,5	14. 38. 14,6	37. 28,98	29,25	44,37		14. 38. 13,70	G.
	(l) α^2 Libræ.....	52,1	6,1	20,0	34,1	48,1	2,0	14. 42. 16,0	41. 34,06	34,69	44,46		14. 42. 19,14	G.
	(p) Σ 1935. <i>np.</i>	19,1	35,2	50,9	7,0	22,7	38,0	15. 13. 54,0	13. 6,70	6,94			15. 13. 51,41	G.
	(m) Σ 1942. <i>sp.</i> or <i>np.</i>	42,2	57,5	11,9	26,2	41,0	55,2	15. 19. 10,1	18. 26,30	26,61			15. 19. 11,09	G.
	(l) α Coronæ Borealis.	37,9	53,2	8,2	23,3	38,6	53,7	15. 28. 9,0	27. 23,42	23,70	44,56		15. 28. 8,18	G.
	α Serpentis.....	12,9	26,7	40,1	53,9	7,4	21,0	15. 36. 34,5	35. 53,79	54,22	44,43		15. 36. 38,71	G.
	(m) Pallas.....	49,0	4,0	18,5	34,0	49,0	3,9	15. 54. 18,4	53. 33,84	34,14			15. 54. 18,64	G.
	(q) Ceres.....	10,0	23,9	37,4	51,7	6,0	19,4	15. 58. 33,8	57. 51,75	52,38			15. 58. 36,88	G.
	Polaris M.....	18,0	2,6	48,0	28,8	13,6	55,8	1. 4. 39,0	2. 26,86	14,57		0,81	1. 2. 59,32	G.
May 18	(r) \odot 1 L.....	39,0	53,3	7,4	21,8	36,1	50,3	3. 40. 5,0	39. 21,85	22,18			3. 40. 7,02	G.
	(k) Polaris SP. M. ...	50,8	31,6	20,0	59,0	40,6	25,0	13. 4. 9,2	2. 2,00	15,07			1. 3. 0,23	G.
	Arcturus.....	7,4	21,9	36,0	50,6	4,9	19,1	14. 8. 33,5	7. 50,49	50,82	45,17		14. 8. 36,02	G.
	ϵ Bootis.....	42,3	57,6	12,5	28,1	43,3	58,7	14. 38. 13,9	37. 28,06	28,33	45,29		14. 38. 13,54	G.
	Pallas.....	56,9	12,1	26,6	42,1	57,2	12,1	15. 53. 26,9	52. 41,99	42,29			15. 53. 27,55	G.
	δ Ophiuchi.....	47,9	1,4	14,8	28,4	....	55,3	16. 6. 8,9	5. 28,38	28,90	45,15		16. 6. 14,16	G.
	Antares.....	24,1	39,0	54,1	9,2	24,1	39,2	16. 19. 54,0	19. 9,10	9,84	45,35		16. 19. 55,11	G.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",95. LEVEL Error = - 1",18. From May 16 = - 1",86. AZIMUTH Error = + 7",61. From May 14 = + 8",66.

(a) So clouded as to be often barely visible. (b) Very faint: observed with difficulty. (c) Extremely faint: a smaller follows about 18". (d) Unsteady. (e) Alone: faint from clouds. (f) Seemed double: quite alone. (g) Tremulous. (h) Faint from haze. (i) Not good. (k) The coincidence-reading of the micrometer was 10",167 for Polaris SP. May 17 and 18, and 10",215 for Polaris May 17. (l) Indefinite. (m) Faint. (n) Observed as single. (o) Not seen double: a fainter preceded about 40". (p) Guesses, star so faint. (q) Clouded. This was a very bad night for observing: the stars were unsteady and ill-defined. Temp. 34° with a strong wind. (r) Cloudy.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	s.	h. m. s.			
May 20	(a) ☉ 1 L. ....	....	....	4,1	18,6	33,0	47,2	3. 48. 1,9	47. 18,59	18,92			0,96	3. 48. 5,55	G.
	☉ 2 L.	50,4	5,0	....	34,0	48,1	2,2	3. 50. 16,8	49. 33,65	33,98				3. 50. 20,61	G.	
	α Orionis	16,9	30,4	44,0	57,7	11,1	24,6	5. 46. 38,2	45. 57,56	57,98	46,72			5. 46. 44,69	G.		
	(b) ☽ 1 L.	21,9	36,7	51,3	6,3	21,2	35,9	6. 19. 50,6	19. 6,27	6,59				6. 19. 53,32	G.		
	Venus 1 L.	32,5	47,5	2,1	17,6	32,5	47,3	7. 6. 2,4	5. 17,42	17,72				7. 6. 4,48	G.		
	Castor	5,0	21,0	36,7	52,9	8,8	24,6	7. 24. 40,4	23. 52,78	53,00	46,87			7. 24. 39,78	G.		
	Procyon.	41,6	55,1	8,7	22,2	35,8	49,2	7. 31. 2,8	30. 22,21	22,65	46,69			7. 31. 9,43	G.		
May 21	(c) Venus 1 L. ....	....	46,0	0,7	16,0	31,0	46,0	7. 9.	9. 15,94	16,24				7. 10. 3,97	G.	
May 23	Venus 1 L.	18,7	33,5	48,4	3,5	18,4	33,3	7. 17. 48,4	17. 3,46	3,77			1,00	7. 17. 53,66	G.		
	Castor . . . . .	....	....	....	49,8	5,4	21,3	7. 24. 37,2	23. 49,49	49,74	50,11			7. 24. 39,64	G.
	Procyon	38,4	52,0	5,4	19,1	32,6	46,0	7. 30. 59,6	30. 19,02	19,47	49,85			7. 31. 9,37	G.		
	Pollux	11,2	26,6	41,6	57,1	12,4	27,5	7. 35. 43,0	34. 57,06	57,36	49,93			7. 35. 47,27	G.		
	☽ 1 L.	34,4	48,5	2,6	17,0	31,0	45,0	8. 55. 59,1	55. 16,80	17,20				8. 56. 7,16	G.		
	α Hydræ	25,9	39,4	53,0	6,7	20,1	33,8	9. 19. 47,4	19. 6,62	7,19	49,83			9. 19. 57,17	G.		
	o Leonis	19,8	33,5	47,1	1,0	14,6	....	9. 32.	32. 0,90	1,32				9. 32. 51,31	G.	
	Regulus	34,0	47,7	1,3	15,4	29,2	43,0	9. 59. 56,8	59. 15,34	15,73	49,96			10. 0. 5,74	G.		
May 24	(c) ☉ 1 L.	34,8	49,2	3,6	18,1	32,5	47,0	4. 4. 1,3	3. 18,07	18,41				4. 4. 9,17	G.		
	☉ 2 L.	50,3	5,0	19,1	33,7	48,1	2,5	4. 6. 17,0	5. 33,68	34,02				4. 6. 24,78	G.		
	(c) Venus 1 L.	7,6	22,6	37,4	52,4	....	....	7. 21. 37,2	20. 52,40	52,71				7. 21. 43,61	G.
	o Leonis.	18,7	32,4	46,0	0,0	13,6	27,1	9. 32. 40,9	32. 59,82	0,24				9. 32. 51,24	G.		
	☽ 1 L.	21,7	35,5	49,2	3,4	17,3	31,2	9. 46. 45,1	46. 3,35	3,80				9. 46. 54,80	G.		
May 25	☉ 1 L.	35,9	50,2	4,6	19,1	33,7	48,1	4. 8. 2,7	7. 19,19	19,53			0,94	4. 8. 11,26	G.		
	☉ 2 L.	51,5	6,1	20,2	35,1	49,7	4,0	4. 10. 18,4	9. 35,00	35,34				4. 10. 27,07	G.		
	(d) Rigel	30,1	43,6	57,1	11,1	24,8	38,1	5. 6. 51,7	6. 10,94	11,52	51,80			5. 7. 3,29	G.		
	Venus 1 L.	53,3	8,2	23,0	38,1	53,0	7,7	7. 25. 22,7	24. 38,00	38,31				7. 25. 30,17	G.		
	Procyon	36,5	50,0	3,3	17,1	30,6	44,1	7. 30. 57,6	30. 17,03	17,48	51,83			7. 31. 9,34	G.		
	Pollux	9,1	24,5	39,7	55,2	10,4	25,5	7. 35. 41,1	34. 55,07	55,37	51,90			7. 35. 47,24	G.		
	Regulus.	31,9	45,7	59,4	13,3	27,1	41,0	9. 59. 54,6	59. 13,29	13,68	51,99			10. 0. 5,64	G.		
	ρ Leonis	4,4	18,1	51,6	45,4	59,1	12,9	10. 24. 26,5	23. 45,43	45,86				10. 24. 37,84	G.		
	☽ 1 L.	23,6	37,2	51,0	5,2	19,0	32,7	10. 37. 46,4	37. 5,01	5,50				10. 37. 57,49	G.		
	(b) d Leonis	59,5	13,0	26,4	40,1	53,7	7,1	10. 52. 20,6	51. 40,06	40,53				10. 52. 32,53	G.		
	α Comæ	51,8	6,1	20,1	34,2	48,7	2,8	13. 2. 17,0	1. 34,39	34,76				13. 2. 26,84	G.		
	B. XIII. 113	52,1	5,9	19,3	33,1	46,8	0,2	13. 7. 14,0	6. 33,07	33,64				13. 7. 25,72	G.		
	(b) Σ 1733 . . . . .	....	....	....	52,0	6,1	20,4	13. 8. 34,4	7. 51,94	52,31				13. 8. 44,39	G.
	(c) Σ 1742	51,4	....	....	31,9	45,8	59,1	13. 16. 12,6	15. 32,05	32,54				13. 16. 24,63	G.
	B. XIII. 375	14,5	28,1	41,7	55,5	9,0	22,5	13. 22. 36,1	21. 55,34	55,91				13. 22. 48,00	G.		
	Σ 1760. sp.	29,9	45,0	0,0	15,4	30,5	45,4	13. 27. 0,8	26. 15,29	15,60				13. 27. 7,70	G.		
	B. XIII. 638	54,8	8,5	2,0	35,9	49,3	3,0	13. 36. 16,5	35. 35,71	36,29				13. 36. 28,39	G.		
	α ² Libræ	44,5	58,6	12,2	26,4	40,5	54,4	14. 42. 8,5	41. 26,44	27,08	52,10			14. 42. 19,23	G.		
May 27	β Leonis.	32,2	46,4	0,2	14,5	28,4	42,2	11. 40. 56,3	40. 14,31	14,70	53,81		0,90	11. 41. 8,53	G.		
	β Virginis. ....	....	....	....	42,7	56,1	9,5	11. 42. 22,9	41. 42,55	43,06				11. 42. 37,00	G.
	η Virginis.	23,7	37,1	50,4	4,1	17,7	31,1	12. 11. 44,5	11. 4,09	4,62				12. 11. 58,47	G.		
	☽ 1 L.	1,2	14,9	28,6	42,9	57,0	10,8	12. 24. 24,9	23. 42,91	43,51				12. 24. 37,36	G.		
	ψ Virginis.	42,4	56,1	9,6	23,3	37,1	50,5	12. 46. 4,2	45. 23,32	23,92				12. 46. 17,79	G.		
	(f) 53 Virginis.	12,6	26,6	40,4	54,6	8,7	22,5	13. 3. 36,5	2. 54,56	55,23				13. 3. 49,11	G.		
	B. XIII. 113	50,4	4,0	17,4	31,2	44,7	58,2	13. 7. 11,9	6. 31,12	31,71				13. 7. 25,59	G.		
	Spica	26,4	40,3	53,8	7,8	21,5	35,0	13. 16. 48,7	16. 7,65	8,26	53,89			13. 17. 2,15	G.		
	Piazzi XIII. 163. .	49,7	5,0	20,3	36,0	51,3	6,6	13. 33. 22,0	32. 35,84	36,14				13. 33. 30,04	G.		
	(b) B. XIII. 638	53,1	6,5	19,9	34,1	47,8	1,2	13. 36. 14,8	35. 33,92	34,52				13. 36. 28,42	G.		
	Σ 1783	37,8	56,0	13,6	32,1	50,2	8,0	13. 39. 26,1	38. 31,98	32,15				13. 39. 26,05	G.		
	Arcturus	58,7	13,0	27,1	41,8	56,1	10,2	14. 8. 24,7	7. 41,66	42,02	53,95			14. 8. 35,94	G.		
	ε Bootis	33,7	49,0	4,0	19,4	34,7	49,7	14. 38. 4,9	37. 19,35	19,66	53,95			14. 38. 13,60	G.		
	α ² Libræ	42,7	56,7	10,4	24,8	38,6	52,5	14. 42. 6,4	41. 24,59	25,26	53,92			14. 42. 19,20	G.		
	(g) Pallas	17,3	32,4	47,2	2,5	17,5	32,3	15. 45. 47,5	45. 2,39	2,72				15. 45. 56,70	G.		
	Ceres	36,1	50,1	3,8	18,1	32,1	45,8	15. 48. 59,8	48. 17,97	17,63				15. 49. 11,61	G.		

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",95. LEVEL Error = - 1",86. From May 23 = - 1",47. AZIMUTH Error = + 8",66. From May 27 = + 9",02.

(a) Clouds passing rapidly. (b) Faint. (c) Cloudy. (d) Bad definition. (e) Cloudy. Observed as single: no other near. (f) The counting being 1" short, each of the last three wires has been increased 1". (g) Very faint.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
May 31	(a) ☉ 1 L.....	6,9	21,3	36,0	50,7	5,0	4. 32. 19,8	31. 36,00	36,35			1,02	4. 32. 33,54	G.
	☉ 2 L.....	23,5	38,0	52,	7,2	22,0	4. 34. 36,4	33. 52,67	53,02				4. 34. 50,21	G.
	Rigel.....	24,7	38,3	51,7	5,6	19,1	5. 6. 46,4	6. 5,47	6,07	57,28			5. 7. 3,29	G.
	Venus 1 L.....	8,9	23,7	38,3	53,1	8,0	7. 46. 37,6	45. 53,21	53,55				7. 46. 50,88	G.
	(b) Polaris SP. M.	46,8	30,2	13,4	56,6	36,0	13. 4. 5,4	1. 58,74	11,62					G.
	Spica.....	22,8	36,4	50,1	4,0	17,5	13. 16. 44,9	16. 3,84	4,45	57,67			13. 17. 2,01	G.
	(c) Σ ₂ 266.....	12,6	26,6	40,4	54,7	8,7	13. 20. 36,9	19. 54,64	55,04				13. 20. 52,61	G.
	(d) B.A.C. 4530.....	43,9	57,4	10,7	24,4	58,0	13. 26. 4,6	25. 24,31	24,84				13. 26. 22,41	G.
	Piazzi XIII. 163.....	45,9	1,3	16,5	32,1	47,4	13. 33. 18,3	32. 32,05	32,35				13. 33. 29,93	G.
	Σ 1783.....	34,1	52,0	10,0	28,2	46,2	13. 39. 22,3	38. 28,15	28,32				13. 39. 25,90	G.
	Σ ₂ 271.....	39,5	53,3	6,9	20,5	34,6	13. 46. 1,8	45. 20,68	21,12				13. 46. 18,70	G.
	ε Bootis.....	45,1	0,0	15,6	31,0	46,0	14. 38. 1,1	37. 15,51	15,82	57,78			14. 38. 13,44	G.
	α ² Libræ.....	39,0	53,0	6,9	20,9	34,9	14. 42. 2,9	41. 20,92	21,59	57,60			14. 42. 19,22	G.
	(e) Pallas.....	19,9	49,8	4,6	19,6	15,42	34,9	41. 49,71	50,04				15. 42. 47,71	G.
	(f) Ceres.....	55,2	9,3	23,0	37,1	51,0	15. 45. 19,0	44. 37,07	37,73				15. 45. 35,40	G.
	Piazzi XV. 220. sf.	5,3	32,4	46,0	59,3	15. 49. 13,1	48. 32,39	32,88					15. 49. 30,55	G.
	β ¹ Scorpii. sp.	45,1	59,4	13,6	28,1	42,4	15. 56. 11,0	55. 28,03	28,74	57,75			15. 56. 26,42	G.
June 1	☉ 1 L.....	56,3	11,0	25,5	40,1	54,9	4. 36. 24,0	35. 40,18	40,55			1,04	4. 36. 38,78	G.
	☉ 2 L.....	13,1	28,0	42,1	56,9	11,7	4. 38. 40,9	37. 56,99	57,36				4. 38. 55,59	G.
	α Orionis.....	5,4	19,0	32,3	46,1	59,5	5. 46. 26,7	45. 46,03	46,49	58,24			5. 46. 44,77	G.
	Procyon.....	30,0	43,6	56,8	10,4	24,0	7. 30. 51,0	30. 10,48	10,97	58,30			7. 31. 9,32	G.
	Pollux.....	2,5	17,8	33,0	48,5	4,0	7. 35. 34,3	34. 48,45	48,78	58,44			7. 35. 47,14	G.
	(g) Venus 1 L.....	27,6	42,0	56,8	11,7	26,3	7. 49. 55,8	49. 11,61	11,97				7. 50. 10,34	G.
	Spica.....	21,8	35,4	49,0	3,0	16,6	13. 16. 44,0	16. 2,88	3,50	58,61			13. 17. 2,11	G.
June 4	(h) α ² Libræ.....	49,1	2,9	17,0	31,0	44,9	14. 41. 58,9	41. 16,98	17,66	61,53		0,96		G.
June 11	(i) Venus 1 L.....	9,2	23,7	37,9	52,7	7,2	8. 18. 36,1	17. 52,64	52,90			0,88	8. 19. 1,41	C.
June 12	(k) ☉ 1 L.....	6,2	20,8	35,5	50,4	4,7	5. 21. 34,4	20. 50,18	50,44				5. 21. 59,73	C.
	☉ 2 L.....	24,0	38,6	53,1	8,2	22,8	5. 23. 52,1	23. 8,02	8,28				5. 24. 17,57	C.
	(l) Mercury 2 L.....	58,2	12,1	26,3	40,4	54,3	4. 9. 22,3	8. 40,28	40,57				4. 9. 50,69	C.
June 13	(m) Aldebaran.....	7,2	21,3	35,2	49,5	3,4	4. 26. 31,4	25. 49,36	49,64	70,22			4. 26. 59,77	C.
	☉ 1 L.....	14,3	29,2	43,8	58,6	13,3	5. 25. 42,8	24. 58,56	58,82				5. 26. 8,99	C.
	☉ 2 L.....	32,1	47,0	1,3	16,4	31,1	5. 28. 0,5	27. 16,32	16,58				5. 28. 26,75	C.
	(n) α Orionis.....	20,7	34,3	48,0	1,3	5. 46. 15,0	45. 34,29	34,64	70,17				5. 46. 44,82	C.
	Antares.....	59,6	14,3	29,1	44,5	59,4	16. 19. 29,2	18. 44,35	44,98	70,48			16. 19. 55,55	C.
June 14	(o) Polaris M.....	10,2	55,0	36,8	21,7	4,3	1. 4. 28,0	2. 17,82	7,67			0,90	1. 3. 18,55	C.
	☉ 1 L.....	22,7	37,3	51,8	6,8	21,5	5. 29. 50,8	29. 6,73	6,99				5. 30. 18,04	C.
	☉ 2 L.....	40,3	55,1	9,5	24,6	39,2	5. 32. 8,8	31. 24,51	24,77				5. 32. 35,82	C.
	(p) α Orionis.....	6,3	19,8	....	....	0,6	5. 46.	45. 33,46	33,81	71,02			5. 46. 44,87	C.
	Polaris SP. M.....	45,3	28,8	10,7	55,0	37,5	13. 4. 3,5	1. 56,91	7,67				1. 3. 19,00	C.
June 15	Spica.....	9,2	22,9	36,4	50,2	4,0	13. 16. 31,3	15. 50,25	50,74	71,29			13. 17. 2,08	C.
	Arcturus.....	41,2	55,6	9,6	24,4	38,6	14. 8. 7,3	7. 24,21	24,48	71,38			14. 8. 35,85	C.
	α Coronæ Borealis.....	11,2	26,3	41,2	56,7	12,0	15. 27. 42,0	26. 56,63	56,86	71,43			15. 28. 8,28	C.
	Ceres.....	42,1	56,0	9,7	24,0	37,8	15. 34. 5,6	33. 23,85	24,39				15. 34. 35,81	C.
	(q) α Serpentis.....	59,8	13,2	27,0	40,6	4,2	15. 36. 7,5	35. 26,94	27,29	71,47			15. 36. 38,72	C.
	α Coronæ Borealis.....	10,2	25,5	40,4	55,7	11,0	15. 28. 41,2	27. 55,73	55,96	12,33		0,90	15. 28. 8,29	C.
	Ceres.....	2,2	16,0	29,9	44,1	58,0	15. 34. 25,7	33. 43,97	44,51				15. 33. 56,84	C.
June 18	α Serpentis.....	45,4	59,1	12,3	26,2	39,7	15. 37. 6,7	36. 26,09	26,44	12,34			15. 36. 38,78	C.
	δ Ophiuchi.....	21,0	34,6	47,8	1,5	15,0	16. 6. 41,8	6. 1,46	1,89	12,36			16. 6. 14,24	C.
	(r) ☉ 1 L.....	56,8	11,7	26,2	41,2	56,0	5. 47. 25,2	46. 41,09	41,38			0,86	5. 46. 55,98	C.
	☉ 2 L.....	14,5	29,2	44,0	59,1	13,6	5. 49. 43,0	48. 58,82	59,11				5. 49. 13,71	C.
June 18	α Herculis.....	38,7	52,7	6,1	20,6	34,4	17. 8. 2,2	7. 20,42	20,74	15,03				C.
	α Ophiuchi.....	48,6	2,5	16,0	30,2	43,8	17. 28. 11,3	27. 30,01	30,35	14,99				C.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = + 1",95. LEVEL Error = - 1",47. From June 1 = - 1",16. From June 11 = - 1",89. From June 18 = - 1",48. AZIMUTH Error = + 9",02. From June 11 = + 7",17. June 14, 22 $\frac{1}{2}$ h, Hardy was put forward 1m.

(a) Frequently clouded. (b) Coincidence-reading 10",222. (c) Only one star seen. (d) Alone: seemed double. (e) Very faint: clouds. (f) Cloudy. (g) Unsteady. (h) After this Mr. Glaisher left on vacation, and observations were suspended for a week. (i) Tremulous. (k) Both limbs ragged and tremulous. (l) Wind loud: the observation has been diminished 1" for error in counting. (m) Temp. 68°,2. (n) Clouds passing: great vibration. (o) Clouded and unsteady. Coincidence-reading of micrometer = 10",218, nearly agreeing with that for Polaris SP., May 31. (p) Worth little, star so much clouded. (q) Hurried. (r) Temp. 61°,2.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
June 21	(a) Venus 1 L.....	....	22,8	37,2	51,5	5,8	20,0	8.38.	34,2		37.51,45		51,75		0,89	8.38.	9,09		C.
	α Orionis.....	45,7	59,4	12,8	26,6	40,2	53,6	5.47.	7,1		46.26,49		26,86	18,05		5.46.	44,98		C.
June 22	(b) ☉ 1 L.....	41,7	56,6	11,2	16,2	40,8	55,5	6.4.	10,3		3.16,05		16,34			6.3.	34,48		C.
	☉ 2 L.....	49,5	4,4	19,1	34,0	48,8	3,5	6.6.	18,2		5.33,94		34,23			6.5.	52,37		C.
	(c) Sirius.....	16,5	30,5	44,3	58,8	12,6	....	6.38.	....		37.58,59		59,16	18,16		6.38.	17,31		C.
	Castor.....	33,7	49,6	5,3	21,5	37,2	53,1	7.25.	9,0		24.21,35		21,56	18,25		7.24.	39,74		C.
	(c) Procyon.....	10,0	23,7	37,0	50,7	4,4	....	7.31.	31,2		30.50,68		51,06	18,20		7.31.	9,25		C.
	Pollux.....	42,9	58,2	13,4	28,9	44,1	59,2	7.36.	14,7		35.28,77		29,02	18,20		7.35.	47,21		C.
	(d) Venus 1 L.....	23,3	37,6	51,6	6,0	20,2	34,6	8.39.	48,8		39.6,02		6,32			8.39.	24,55		C.
	Ceres.....	0,0	13,8	27,6	41,8	55,7	9,5	15.30.	23,4		29.41,69		42,24			15.30.	0,72		C.
	(e) α Serpentiis.....	39,2	52,7	6,3	20,1	33,6	47,2	15.37.	0,5		36.19,95		20,32	18,45		15.36.	38,81		C.
	(f) ☉ 1 L.....	29,1	43,8	58,1	13,2	....	42,8	6.32.	....		32.13,17		13,42		0,92	6.32.	38,18		G.
June 29	☉ 2 L.....	46,7	1,3	16,0	31,0	45,4	0,4	6.35.	15,1		34.30,85		31,10			6.34.	55,86		G.
	Arcturus.....	27,4	41,8	55,9	10,5	24,9	39,0	14.8.	53,2		8.10,39		10,65	25,07		14.8.	35,70		G.
	ε Bootis.....	2,3	17,7	32,7	48,1	3,4	18,5	14.38.	33,8		37.48,07		48,29	25,10		14.38.	13,36		G.
	α ² Libræ.....	11,6	25,7	39,4	53,7	7,6	21,5	14.42.	35,4		41.53,57		54,06	25,04		14.42.	19,13		G.
	α Coronæ Borealis.....	57,1	12,4	27,4	43,0	58,0	13,1	15.28.	28,2		27.42,75		42,98	25,23		15.28.	8,08		G.
	α Ophiuchi.....	38,5	52,3	6,1	20,1	34,0	47,7	17.28.	1,6		27.20,05		20,34	25,06		17.27.	45,52		G.
	(g) ☽ 1 L.....	49,6	4,7	19,5	35,0	50,0	5,0	18.18.	20,1		17.34,84		35,39			18.18.	0,60		G.
	Venus 1 L.....	12,1	26,1	40,1	54,5	8,5	22,4	8.44.	36,5		43.54,31		54,60		0,92	8.44.	21,29		G.
	(e) α Ophiuchi.....	....	....	....	....	32,0	45,5	17.27.	59,6		27.18,08		18,37	27,03					G.
	(h) ☉ 1 L.....	36,3	50,9	....	19,9	34,6	49,2	7.18.	3,6		17.19,96		20,11		0,79	7.17.	55,08		C.
July 10	☉ 2 L.....	....	....	21,7	36,4	....	5,5	7.20.	20,2		19.36,38		36,53			7.20.	11,50		C.
	(i) Venus 1 L.....	24,1	37,8	51,8	6,1	19,8	33,7	8.36.	47,6		36.5,84		6,01			8.36.	41,02		C.
	(k) Regulus.....	....	....	16,1	30,2	43,9	57,7	10.0.	11,5		59.30,07		30,25	35,06					C.
	(l) η Tauri.....	....	10,4	25,0	40,0	54,6	9,2	3.38.	24,0		37.39,85		39,98		0,92	3.38.	15,59		C.
	(m) ☽ 2 L.....	41,8	56,6	11,1	....	....	....	3.58.	....		58.26,14		26,29			3.59.	1,91		C.
	(n) Rigel.....	47,1	0,7	14,1	28,2	41,6	55,2	5.7.	8,8		6.27,96		28,28	35,65		5.7.	3,95		C.
	α Orionis.....	28,6	42,0	55,5	9,3	23,0	36,4	5.46.	50,1		46.9,28		9,49	35,73		5.46.	45,18		C.
	Sirius.....	59,3	13,3	27,1	41,5	55,6	9,7	6.38.	23,6		37.41,45		41,84	35,65		6.38.	17,56		C.
	(o) ☉ 1 L.....	40,2	54,8	9,2	24,0	....	....	7.21.	....		21.23,92		24,07			7.21.	59,82		C.
	(p) Venus 1 L.....	....	....	13,3	27,7	41,4	55,2	8.35.	9,1		34.27,41		27,58			8.35.	3,38		C.
July 11	Regulus.....	47,8	1,6	15,1	29,2	43,3	56,9	10.0.	10,7		59.29,23		29,41	35,90		10.0.	5,26		C.
	(q) Polaris SP. M. ....	....	27,5	11,3	54,2	37,0	20,5	13. ....	....		2.57,19		6,59						C.
	Arcturus.....	16,3	50,7	44,8	59,5	14,0	28,2	14.8.	42,4		7.59,42		59,57	36,00		14.8.	35,58		C.
	ε Bootis.....	51,4	6,7	21,8	37,2	52,4	7,3	14.38.	22,7		37.37,07		37,17	36,06		14.38.	13,20		C.
	β Bootis.....	37,2	55,0	12,7	30,8	48,7	6,4	14.56.	24,3		55.30,73		30,76			14.56.	6,80		C.
	(r) ☉ 2 L.....	0,0	14,5	29,0	43,8	58,3	12,7	7.28.	27,4		27.43,68		43,83		0,93	7.28.	20,50		C.
	Arcturus.....	15,3	29,7	44,0	58,5	12,7	27,1	14.8.	41,4		7.58,39		58,54	37,02					C.
	(s) β Lyræ.....	57,3	....	29,4	45,8	1,9	18,1	18.44.	34,1		43.45,74		45,82	37,02					C.
	(t) Mercury 2 L.....	2,3	17,2	32,0	46,8	1,7	16,2	7.8.	31,2		7.46,77		46,91		0,91	7.8.	26,47		C.
	Arcturus.....	12,4	26,8	41,0	55,7	10,0	24,3	14.8.	38,6		7.55,54		55,69	39,83		14.8.	35,52		C.
July 15	ε Bootis.....	47,5	2,8	17,8	33,3	48,5	3,7	14.38.	18,9		37.33,22		33,32	39,86		14.38.	13,16		C.
	β Bootis.....	33,2	51,2	8,8	27,0	44,8	2,5	14.56.	20,4		55.26,85		26,88			14.56.	6,74		C.
	(u) Σ 2007.....	....	41,4	55,2	9,2	23,1	37,0	15.58.	50,9		58.9,19		9,37			15.58.	49,38		C.
	δ Ophiuchi.....	53,5	7,0	20,3	34,1	47,6	0,9	16.6.	14,5		5.33,99		34,27	39,92		16.6.	14,17		C.
	α ² Capricorni.....	6,1	20,0	33,7	47,7	1,5	15,2	20.9.	29,1		8.47,62		47,97	40,01		20.9.	28,02		C.
	ε Bootis.....	45,7	1,1	16,0	31,5	46,6	1,8	14.38.	17,0		37.31,39		31,54	41,61	0,95	14.38.	13,11		C.
	β Bootis.....	31,4	49,4	7,0	25,2	43,0	0,7	14.56.	18,6		55.25,04		25,09			14.56.	6,67		C.
	Σ 2104. sp.....	37,3	54,1	10,7	27,6	44,3	0,9	16.43.	17,7		42.27,52		27,61			16.43.	9,26		C.
	(x) η Ophiuchi.....	6,4	20,3	34,2	48,5	2,2	16,2	17.1.	30,4		0.48,32		48,79			17.1.	30,45		C.
	α Herculis.....	12,2	26,2	40,0	54,1	7,9	21,7	17.7.	35,7		6.53,97		54,20	41,57		17.7.	35,87		C.

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = +1",95. From July 10 = +1",37. LEVEL Error = -1",48. From July 10 = -1",99. AZIMUTH Error = +7",17. From June 29 = +6",22. From July 10 = +5",28. From July 17 = +6",62.

(a) Through clouds: excessively faint. (b) The observation was injured by the dark-glass frame falling from its place. In the observation of 1 L., Wire III. has been increased 11", and each of the others 10". (c) Cloudy: great unsteadiness. (d) Vibrating. (e) After each of these the transit observations were unavoidably suspended. (f) Clouds and bad definition. (g) 2 L. was not quite full. (h) Both limbs much clouded and observed doubtfully,—mostly without the dark-glass. (i) Extremely tremulous. (k) Faint. (l) Star seen just before Wire I., which was written down doubtfully 55,2. (m) Cloud came over. (n) Good. (o) Uncertain from clouds. (p) Clouded and tremulous. (q) The micrometer-reading for coincidence with Wire IV. was found after the observation to be 10",210: the value used was 10",226. A correction +0",55 has been applied on this account. (r) Clouded, but good for observing. (s) Cloudy. Wire I. was set down 56",3: counting corrected by looking at the clock. (t) Wire VII. uncertain, a cloud coming over. (u) In daylight: the small star not seen. (x) Flaring.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
July 17	(a) Σ 2147.....	....	....	34,4	50,1	5,5	21,0	17. 11. 36,2	10. 50,03	51,17		0,95	17. 11. 32,84	C.
	(b) c^2 Ophiuchi.....	32,1	47,0	1,6	16,5	31,3	46,1	17. 22. 0,8	21. 16,49	17,03			17. 21. 58,71	C.
	α Ophiuchi	22,0	35,8	49,5	3,5	17,3	31,0	17. 27. 44,8	27. 3,42	3,66	41,73		17. 27. 45,34	C.
July 18	Venus 1 L. ....	....	1,6	15,4	29,5	43,4	57,3	8. 20. 11,2	19. 29,46	29,69			8. 20. 11,96	C.
	Polaris SP. ....	....	....	....	50,0	26,6	47,8	13. 19.	2. 54,15	5,68				C.
July 19	α Aquarii	25,4	39,2	52,1	5,9	19,1	32,9	21. 57. 46,3	57. 5,84	6,11	43,96	0,97		G.
July 20	(c) Venus 1 L. ....	....	....	10,0	24,1	37,9	51,9	8. 15. 5,8	14. 24,08	24,27		0,94	8. 15. 8,60	G.
	ϵ Bootis	42,8	57,9	13,0	28,4	43,7	59,0	14. 38. 14,0	37. 28,40	28,53	44,57		14. 38. 13,11	G.
	α^2 Libræ	52,0	6,0	19,9	....	48,1	1,9	14. 42. 16,0	41. 33,99	34,35	44,56		14. 42. 18,94	G.
	α Coronæ Borealis.	37,9	53,0	8,0	23,2	38,5	53,6	15. 28. 8,8	27. 23,29	23,43	44,53		15. 28. 8,04	G.
	α Serpentis.....	13,1	26,8	40,0	54,0	7,4	21,0	15. 36. 34,6	35. 53,84	54,06	44,53		15. 36. 38,68	G.
	Antares.....	25,1	40,2	55,2	10,4	25,2	40,3	16. 19. 55,3	19. 10,25	10,67	44,75		16. 19. 55,32	G.
	α Herculis.	9,1	23,0	37,1	51,0	4,9	18,4	17. 7. 32,5	6. 50,86	51,05	44,75		17. 7. 35,73	G.
July 21	β Tauri.	55,9	11,5	26,4	42,1	57,2	12,7	5. 16. 28,0	15. 41,98	42,11	46,25	0,95	5. 16. 28,26	G.
	α Orionis.....	....	32,1	45,3	59,1	12,8	26,1	5. 46. 39,8	45. 59,08	59,30	46,15		5. 46. 45,47	G.
	(d) δ Ursæ Minoris SP.	33,0	17,0	4,4	52,2	43,0	27,6	6. 33. 15,0	21. 53,17	56,42			18. 22. 42,61	G.
July 22	Sirius	49,1	2,9	16,9	31,1	45,1	59,1	6. 38. 13,2	37. 31,06	31,43	46,23		6. 38. 17,63	G.
	\odot 1 L.	51,3	5,9	20,0	35,0	49,0	3,4	8. 6. 18,2	5. 34,69	34,86			8. 6. 21,12	G.
	\odot 2 L.	6,1	21,0	35,0	49,8	4,1	18,4	8. 8. 33,1	7. 49,65	49,82			8. 8. 36,08	G.
	(e) Venus 1 L. ....	....	....	....	8,9	22,9	36,7	8. 9. 50,4	9. 8,90	9,09			8. 9. 55,35	G.
	Regulus.....	37,2	51,1	4,9	18,9	32,8	46,2	10. 0. 0,1	59. 18,75	18,94	46,35		10. 0. 5,28	G.
	Spica.....	34,0	47,7	1,0	15,0	28,6	42,2	13. 16. 56,0	16. 14,93	15,25	46,40		13. 17. 1,71	G.
	γ 1 L.	46,3	0,9	15,0	29,4	43,9	58,0	13. 37. 12,3	36. 29,40	29,76			13. 37. 16,24	G.
	Arcturus.....	5,9	20,1	34,4	48,9	3,3	17,5	14. 8. 31,9	7. 48,86	49,03	46,40		14. 8. 35,53	G.
	(d) δ Ursæ Minoris SP.	32,2	18,4	3,6	51,8	42,2	26,0	6. 33. 12,6	21. 52,40	55,65		0,97	18. 22. 42,78	G.
	Sirius.....	48,0	2,1	16,0	30,1	44,4	58,4	6. 38. 12,3	37. 30,19	30,56	47,11		6. 38. 17,70	G.
	Procyon	41,6	55,2	8,7	22,2	35,8	49,1	7. 31. 2,9	30. 22,22	22,45	47,07		7. 31. 9,62	G.
July 23	Pollux.....	14,0	29,7	44,5	0,2	15,7	30,8	7. 35. 46,0	35. 0,13	0,26	47,25		7. 35. 47,44	G.
	\odot 1 L.	49,1	3,7	17,6	32,2	46,8	1,1	8. 10. 15,4	9. 32,28	32,45			8. 10. 19,65	G.
	\odot 2 L.	3,6	18,2	32,5	47,0	1,5	15,9	8. 12. 30,1	11. 46,97	47,14			8. 12. 34,34	G.
	γ 1 L.	28,9	43,4	58,0	13,0	27,6	42,1	14. 35. 56,9	35. 12,85	13,23			14. 36. 0,69	G.
	α Ophiuchi.....	16,0	30,0	43,7	57,8	11,6	25,2	17. 27. 39,0	26. 57,62	57,81	47,56		17. 27. 45,38	G.
	δ Ursæ Minoris...	37,6	21,4	7,0	57,8	44,5	31,0	18. 33. 18,8	21. 56,87	55,09			18. 22. 42,70	G.
	β Lyræ.	46,6	3,0	18,8	35,1	51,1	7,1	18. 44. 23,4	43. 35,01	35,12	47,72		18. 44. 22,75	G.
July 24	γ 1 L.	27,2	42,0	56,9	12,4	27,1	42,0	15. 37. 57,0	37. 12,09	13,49		1,00	15. 38. 0,99	G.
	β^1 Scorpii.....	54,8	8,9	23,1	37,5	52,0	6,1	15. 56. 20,5	55. 37,56	37,94	48,47		15. 56. 26,46	G.
	δ Ophiuchi.	44,9	58,2	11,7	25,4	38,9	52,3	16. 6. 5,9	5. 25,33	25,60	48,52		16. 6. 14,12	G.
	Antares.	21,4	36,5	51,2	6,5	21,4	36,4	16. 19. 51,5	19. 6,42	6,84	48,55		16. 19. 55,37	G.
	α Herculis.	5,0	19,0	32,9	47,0	1,0	14,9	17. 7. 28,8	6. 46,94	47,12	48,60		17. 7. 35,68	G.
	(f) Σ 2157.	26,2	40,9	54,9	9,3	23,1	37,1	17. 15. 51,0	15. 8,93	9,10			17. 15. 57,67	G.
	ρ Herculis. sf. ....	....	....	15,6	32,6	49,7	6,7	17. 18. 23,6	17. 32,72	32,80			17. 18. 21,37	G.
	(g) Σ 2173.	56,9	10,4	23,7	37,4	50,8	4,2	17. 22. 17,7	21. 37,30	37,56			17. 22. 26,13	G.
	α Ophiuchi.....	15,2	29,0	42,8	56,8	10,5	24,1	17. 27. 38,0	26. 56,63	56,81	48,55		17. 27. 45,39	G.
	α Aquilæ.....	44,7	58,2	11,7	25,6	39,1	52,8	19. 43. 6,3	42. 25,49	25,70	48,67		19. 43. 14,37	G.
July 25	Venus 2 L.	35,9	49,6	3,2	17,2	31,1	45,0	8. 1. 58,8	1. 17,26	17,44			8. 2. 6,62	G.
	\odot 1 L.	42,9	57,0	11,2	25,8	39,9	54,7	8. 18. 9,0	17. 25,79	25,95			8. 18. 15,15	G.
July 26	\odot 2 L.	57,1	11,3	25,8	40,2	54,6	8,9	8. 20. 23,1	19. 40,15	40,31			8. 20. 29,51	G.
	(h) \odot 1 L.	38,7	53,0	6,9	....	....	....	8. 21.	21. 21,54	21,70		1,04	8. 22. 11,95	G.
July 27	\odot 2 L. ....	....	....	....	35,9	50,1	4,2	8. 24. 18,4	23. 35,65	35,81			8. 24. 26,06	G.
	\odot 1 L. ....	....	....	....	16,9	31,2	45,6	8. 25. 59,8	25. 16,92	17,08		0,98	8. 26. 8,42	G.
July 27	\odot 2 L.	48,0	2,1	16,2	30,9	45,1	59,4	8. 28. 13,8	27. 30,79	30,95			8. 28. 22,29	G.

ILLUMINATED END OF AXIS WEST. From July 27, EAST. COLLIMATION Error = + 1",37. From July 27 = - 1",42. LEVEL Error = - 1",99. From July 19 = - 1",29. From July 24 = - 1",50. From July 27 = - 0",06. AZIMUTH Error = + 6",62. From July 19 = + 4",64. From July 27 = + 5",87.

The Transit was reversed July 26, 1^h.

(a) Not seen double: an equal star followed. (b) Named c^2 in B.A.C. (c) Clouds passing. (d) Excessively faint and difficult to observe. (e) The cusps had nearly the same N.P.D.: the first Limb was rather more illumined than the other. (f) Not seen double. No other near. (g) Seemed to be double. This star is in Argelander's *Uranometria Nova*. (h) Cloudy. The clock is assumed to be 49",89 slow at 0^h.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
July 27	α Herculis.	2,0	16,0	29,8	43,8	57,9	11,7	17.	7.	25,6	6.	43,84	44,02	51,68	0,98	17.	7.	35,72	G.
	α Ophiuchi.	12,0	25,9	39,5	53,1	7,3	21,0	17.	27.	34,9	26.	53,39	53,58	51,75		17.	27.	45,29	G.
	μ^1 Sagittarii.	55,1	10,0	24,1	38,8	53,2	7,6	18.	4.	22,0	3.	38,69	39,00	51,61		18.	4.	30,74	G.
	λ Sagittarii.	48,7	3,5	18,3	33,1	48,6	3,2	18.	18.	18,1	17.	33,36	33,67			18.	18.	25,42	G.
	δ 1 L.	54,3	9,1	24,2	39,1	54,1	8,9	18.	52.	24,1	51.	39,12	39,43			18.	52.	31,20	G.
	ρ^1 Sagittarii.	7,1	21,3	35,8	50,0	4,2	18,1	19.	12.	32,4	11.	49,85	50,14			19.	12.	41,92	G.
	e^2 Sagittarii.	6,0	20,0	34,0	48,0	2,2	16,1	19.	33.	30,1	32.	48,06	48,34			19.	33.	40,14	G.
	α Aquilæ.	41,6	55,0	8,5	22,1	36,0	49,4	19.	43.	3,1	42.	22,25	22,46	51,93		19.	43.	14,26	G.
	β Aquilæ.	10,2	23,8	37,6	50,9	4,5	18,0	19.	47.	31,5	46.	50,94	51,15	51,95		19.	47.	42,96	G.
	α^2 Capricorni.	54,6	8,4	22,2	36,1	50,0	4,0	29.	9.	17,8	8.	36,16	36,44	51,67		20.	9.	28,26	G.
July 29	δ Ophiuchi.	40,1	53,8	7,0	20,7	34,2	47,5	16.	6.	1,1	5.	20,64	20,52	53,55	0,93	16.	6.	14,08	G.
	Antares.	16,8	31,9	46,5	1,9	16,9	31,8	16.	19.	46,8	19.	1,81	1,84	53,50		16.	19.	55,41	G.
	α Herculis.	0,6	14,5	28,1	42,3	56,2	10,1	17.	7.	24,0	6.	42,27	42,01	53,67		17.	7.	35,61	G.
	(a) Σ 2157.	21,9	36,1	50,1	4,3	18,2	32,4	17.	15.	46,5	15.	4,21	3,95			17.	15.	57,56	G.
	ρ Herculis. <i>sf.</i>			10,4	28,1	45,0	2,2	17.	18.	18,9	17.	28,00	27,51			17.	18.	21,12	G.
	(b) Σ 2173.	52,2	5,4	19,0	32,7	46,1	59,5	17.	22.	13,2	21.	32,59	32,46			17.	22.	26,07	G.
	(c) Σ 2173. XVII. 135.	44,0	57,3	10,7	24,2	37,9	51,3	17.	24.	4,8	23.	24,31	24,16			17.	24.	17,77	G.
	α Ophiuchi.	10,5	24,2	38,0	52,0	5,9	19,4	17.	27.	33,4	26.	51,92	51,70	53,62		17.	27.	45,31	G.
	(a) Σ , 333.				41,6	55,0	8,9	17.	29.	22,6	28.	41,43	41,21			17.	29.	34,83	G.
	(d) Σ 2198. <i>sp.</i>	47,1	2,4	17,5	32,8	47,5	2,6	17.	36.	18,0	35.	32,56	32,20			17.	36.	25,82	G.
	Σ 2217. <i>np.</i>	3,8	17,8	31,4	45,8	59,8	13,5	17.	39.	27,4	38.	45,64	45,38			17.	39.	39,00	G.
	(a) Σ 2217. XVII. 260.	31,4	45,1	58,4	12,3	26,0	39,4	17.	42.	53,0	42.	12,24	12,05			17.	43.	5,68	G.
	α^2 Capricorni.	53,0	6,9	20,4	34,6	48,2	2,1	20.	9.	16,0	8.	34,46	34,41	53,72		20.	9.	28,13	G.
	ϵ Aquarii.	43,0	56,9	10,4	24,2	38,0	51,4	20.	39.	5,4	38.	24,19	24,13			20.	39.	17,87	G.
	δ 2 L.	19,1	33,4	47,3	2,1	16,3	30,4	20.	54.	44,8	54.	1,92	1,88			20.	54.	55,63	G.
	β Aquarii.	50,3	4,0	17,3	31,0	44,8	58,1	21.	23.	11,8	22.	31,05	30,96	53,84		21.	23.	24,73	G.
	λ Capricorni.	37,1	51,0	4,5	18,8	32,4	46,0	21.	38.	0,0	37.	18,55	18,50			21.	38.	12,28	G.
July 30	(e) Venus 2 L.	8,9			50,5	4,2	18,1	7.	47.	32,0	46.	50,40	50,16			7.	47.	45,26	G.
Aug. 1	Pollux.	5,0	20,3	35,6	51,0	6,5	21,6	7.	35.	37,0	34.	51,01	51,22	56,46	0,86	7.	35.	47,83	G.
	(f) Venus 2 L.	8,1	22,1	35,7	50,1		17,3	7.	43.		42.	49,79	50,10			7.	43.	46,72	G.
Aug. 2	(g) \odot 1 L.	53,4	7,7	21,6	35,9	50,2	4,2	7.	49.	18,2	48.	35,89	36,17			7.	49.	32,79	G.
	\odot 2 L.	6,2	20,6	34,6	48,8	3,2	17,1	7.	51.	31,3	50.	48,83	49,11			7.	51.	45,73	G.
	ϵ Bootis.			0,6	15,9	31,2	46,4	14.	38.	1,8	37.	15,95	16,15	56,74		14.	38.	13,01	G.
	α Aquilæ.	36,1	49,7	3,1	16,9	30,6	44,1	19.	42.	57,7	42.	16,89	17,23	57,17		19.	43.	14,28	G.
	β Aquilæ.	5,0	18,6	32,0	45,6	59,4	12,7	19.	47.	26,2	46.	45,64	45,99	57,13		19.	47.	43,04	G.
	α^2 Capricorni.	49,2	3,0	16,9	30,5	44,2	58,4	20.	9.	12,1	8.	30,62	31,06	57,09		20.	9.	28,12	G.
	(h) Venus 2 L.	20,5	34,2	48,1	2,1	16,0	30,0	7.	41.	43,8	41.	2,11	2,42			7.	41.	59,90	G.
Aug. 3	Mercury 1 L.	1,1	15,0	29,0	42,8	57,0	10,9	9.	48.	24,9	47.	42,97	43,27			9.	48.	40,82	G.
Aug. 4	(i) α Aquilæ.	34,2	48,1	1,5	15,1	29,0	42,1	19.	42.	56,0	42.	15,14	15,48	58,93	0,88	19.	43.	14,24	G.
	Castor.	53,1	9,1	25,1	41,0	57,1	12,6	7.	24.	28,9	23.	40,99	41,17	59,23		7.	24.	40,36	G.
	Procyon.	29,7	43,1	56,6	10,1	24,0	37,3	7.	30.	51,0	30.	10,26	10,62	59,10		7.	31.	9,81	G.
	Pollux.	2,4	17,8	33,0	48,3	4,0	19,0	7.	35.	34,3	34.	48,40	48,61	59,12		7.	35.	47,81	G.
	Venus 2 L.	11,1	25,1	38,9	52,6	6,7	20,2	7.	38.	34,4	37.	52,72	53,03			7.	38.	52,23	G.
Aug. 5	\odot 1 L.	25,2	39,1	53,2	7,6	21,9	36,0	9.	0.	50,1	0.	7,59	7,89			9.	1.	7,14	G.
	\odot 2 L.	37,7	51,8	5,9	20,0	34,2	48,2	9.	3.	2,4	2.	20,03	20,33			9.	3.	19,58	G.
Aug. 6	Arcturus.	51,8	6,0	20,1	34,5	49,1	3,2	14.	8.	17,6	7.	34,61	34,88	60,33	0,92				G.
	α^2 Capricorni.	45,8	59,6	13,1	27,1	41,1	55,0	20.	9.	8,5	8.	27,17	27,61	60,56					G.
	δ 2 L.	7,9	22,4	37,1	52,1	7,1	21,4	3.	38.	36,2	37.	52,04	52,31		0,89	3.	38.	53,17	G.
	Aldebaran.	18,1	32,0	46,0	0,1	14,3	28,1	4.	26.	42,1	26.	0,11	0,41	60,85		4.	27.	1,30	G.
	Rigel.	22,5	36,0	49,4	3,1	17,1	30,7	5.	6.	44,3	6.	3,31	3,73	60,86		5.	7.	4,65	G.
	β Tauri.	41,7	57,0	12,2	27,6	43,1	58,3	5.	16.	13,5	15.	27,63	27,84	60,99		5.	16.	28,76	G.
Aug. 7	Mercury 1 L.			19,0	32,9	46,8	0,6	10.	15.	14,6	14.	32,95	33,27			10.	15.	34,38	G.

ILLUMINATED END OF AXIS EAST. From July 29, WEST. From Aug. 1, EAST. COLLIMATION Error = - 1",42. From July 29 = - 5",47. From Aug. 1 = + 1",13. (See Introduction.) LEVEL Error = - 0",06. From July 29 = - 1",92. From Aug. 1 = - 1",30. AZIMUTH Error = + 5",87. From July 29 = + 6",25.

The Transit was reversed July 28, 19^h, and July 31, 6^h.

(a) Alone. (b) Seemed double: a fainter precedes 20^s. (c) Alone: observed as single. (d) A star of 7,8 magnitude: H. C. 32386. The time differs 1^m from Struve's. (e) Clouds passing rapidly. (f) Much clouded, and very unsteady. (g) Frequently clouded. (h) Cloudy. (i) Indefinite.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Aug. 7	α Aquilæ	31,6	45,1	58,8	12,5	26,1	39,8	19.42.53,4	42.12,48	12,85	61,56	0,89	19.43.14,31	G.
	β Aquilæ	0,6	14,2	27,6	41,1	55,0	8,2	19.47.22,0	46.41,25	41,63	61,50		19.47.43,09	G.
	(a) Σ 2606	45,4	1,7	17,4	33,5	50,0	5,8	19.52.22,0	51.33,69	33,92			19.52.35,39	G.
	(b) Σ 2626	16,7	32,1	47,7	3,1	19,1	34,4	19.57.50,0	57.3,31	3,56			19.58.5,03	G.
	(c) Σ 2643. sp.	0,0	13,4	27,0	40,4	54,2	7,4	20.4.21,1	3.40,51	40,93			20.4.42,40	G.
	α^2 Capricorni	44,9	58,7	12,4	26,1	40,2	54,1	20.9.8,0	8.26,34	26,80	61,37		20.9.28,27	G.
	Σ 2671. sf.	25,7	49,1	12,1	35,7	59,5	22,5	20.14.46,1	13.35,81	35,85			20.14.37,33	G.
	Σ 2681	32,9	55,2	17,3	39,8	2,4	24,7	20.18.47,2	17.39,93	39,99			20.18.41,47	G.
	4 Aquarii	31,1	44,5	58,1	11,6	25,4	38,9	20.42.52,2	42.11,69	12,12			20.43.13,61	G.
	Σ 2738. nf.	36,4	50,8	4,6	18,4	32,9	46,5	20.51.0,7	50.18,62	18,96			20.51.20,46	G.
	β Aquarii	42,3	56,0	9,3	22,9	36,7	50,0	21.23.3,5	22.22,97	23,40	61,50		21.23.24,92	G.
	Aldebaran	17,1	31,1	45,1	59,2	13,3	27,1	4.26.41,2	25.59,16	59,50	61,79	0,80		G.
	γ 2 L.	30,2	45,1	0,0	15,1	30,0	44,9	4.30.59,5	30.14,97	15,27			4.31.17,01	G.
	β Tauri	41,0	56,1	11,5	26,9	....	57,4	5.16.13,0	15.26,90	27,16	61,70			G.
Aug. 8	(d) \odot 1 L.	51,7	5,9	19,8	33,8	48,0	1,9	9.12.16,0	11.33,88	34,22			9.12.36,12	G.
	\odot 2 L.	3,4	17,4	31,3	45,3	59,8	....	9.13.	13.45,49	45,83			9.14.47,73	G.
	γ 2 L.	52,1	7,0	22,0	37,0	52,0	6,6	5.24.21,4	23.36,87	37,17		0,79	5.24.39,73	G.
	α Orionis	2,1	15,8	29,2	43,0	56,6	10,0	5.46.23,8	45.42,94	43,31	62,57			G.
	Aug. 10	δ Ursæ Minoris	37,8	27,0	11,6	18.32.58,0	21.37,81	34,83		0,90	18.22.38,78	G.
(e) Σ 2484 .....		....	....	....	....	37,9	52,0	19.7.6,4	6.23,60	23,92			19.7.27,90	G.
Σ 2489 .....		....	....	....	....	31,8	45,6	19.8.59,5	8.17,79	18,14			19.9.22,12	G.
Σ 2499. sf.		9,0	23,9	38,1	52,7	7,3	21,4	19.11.36,1	10.52,65	52,95			19.11.56,93	G.
(f) Σ 2504. sf.		24,3	38,2	52,8	6,9	21,3	35,4	19.13.50,0	13.6,99	7,31			19.14.11,29	G.
(g) B.A.C. 6639		18,2	34,0	49,2	4,9	20,9	36,1	19.16.51,8	16.5,01	5,57			19.17.9,55	G.
(h) Σ 2556		0,2	14,8	29,1	43,7	58,3	13,0	19.32.27,2	31.43,77	44,07			19.32.48,06	G.
Σ 2576. np.		49,0	5,0	21,0	37,2	54,0	9,7	19.39.26,0	38.37,42	37,65			19.39.41,65	G.
α Aquilæ		29,2	42,7	56,0	9,9	23,7	37,1	19.42.50,8	42.9,92	10,29	64,11		19.43.14,29	G.
β Aquilæ		58,1	11,6	25,0	38,4	52,4	5,9	19.47.19,4	46.38,69	39,07	64,05		19.47.43,07	G.
β Aquarii .....		....	53,2	6,9	20,4	34,0	47,6	21.23.1,1	22.20,43	20,86	64,06		21.23.24,92	G.
α Aquarii		5,4	19,0	32,3	46,0	59,7	13,0	21.57.26,3	56.45,96	46,37	64,04		21.57.50,45	G.
(i) δ Ursæ Minoris SP.		....	57,2	42,8	29,6	18,4	5,6	6.29.	21.30,66	34,24			18.22.38,64	G.
Sirius		31,1	45,1	59,0	13,0	27,4	41,4	6.37.55,4	37.13,21	13,69	64,35		6.38.18,10	G.
Aug. 12	β Aquilæ	56,3	9,9	23,4	37,0	50,5	4,0	19.47.17,6	46.36,96	37,34	65,78	0,85		G.
Aug. 14	(k) α Coronæ Borealis.	14,6	29,7	44,8	0,0	15,3	30,1	15.28.45,5	28.0,01	0,27	7,28	0,87		G.
Aug. 17	Spica .....	....	23,7	37,1	51,0	5,0	18,3	13.17.32,1	16.51,03	51,40	9,95	1,02	13.17.1,42	G.
	(k) α Coronæ Borealis	....	27,0	42,1	57,0	12,6	27,5	15.28.42,6	27.57,22	57,48	10,02		15.28.7,60	G.
	α Serpentis .....	....	0,4	14,0	27,6	41,4	55,0	15.37.8,4	36.27,69	28,03	10,19		15.36.38,15	G.
	α Ophiuchi	53,1	7,0	20,8	34,4	48,4	2,1	17.28.16,0	27.34,54	34,86	10,24		17.27.45,06	G.
	(l) Σ 2415. sf.	59,4	14,0	28,1	42,3	57,2	11,5	18.48.25,7	47.42,61	42,90			18.47.53,16	G.
	B.A.C. 6525	49,1	4,4	20,0	35,1	51,0	6,0	18.58.21,5	57.35,30	35,77			18.57.46,04	G.
	Σ 2466. np.	55,0	10,5	26,1	41,2	57,1	12,2	19.2.28,0	1.41,45	41,70			19.1.51,97	G.
	Σ 2484. nf.	34,6	48,8	2,9	17,1	31,5	45,6	19.8.0,1	7.17,23	17,53			19.7.27,80	G.
	Σ 2499. sf.	2,9	17,1	31,9	46,1	1,1	15,2	19.12.30,1	11.46,35	46,64			19.11.56,92	G.
	Σ 2504. sf.	18,0	32,2	46,4	0,5	15,1	29,2	19.14.43,4	14.0,69	0,99			19.14.11,27	G.
	B.A.C. 6639	12,1	27,8	43,2	58,7	14,5	30,1	19.17.45,6	16.58,86	59,33			19.17.9,61	G.
	(h) Σ 2556 .....	....	8,3	22,4	37,1	52,0	6,4	19.33.21,0	32.37,27	37,56			19.32.47,83	G.
	57 Sagittarii	18,9	33,1	47,2	1,7	16,0	30,1	19.43.44,5	43.1,65	2,06			19.43.12,36	G.
	β Aquilæ	51,9	5,2	18,8	32,3	46,1	59,4	19.48.13,0	47.32,39	32,73	10,37		19.47.43,03	G.
(m) * N.P.D. 57°. 8'.	24,1	40,2	56,2	12,1	28,2	44,3	19.53.0,0	52.12,17	12,41			19.52.22,71	G.	
Σ 2606	36,7	52,9	8,7	24,6	41,0	56,9	19.53.13,0	52.24,83	25,07			19.52.35,37	G.	
Aug. 18	(k) Castor .....	....	....	12,6	28,4	44,8	0,6	7.25.16,2	24.28,59	28,83	11,89	1,05		G.
	(k) Venus 2 L.	7,1	21,0	34,9	48,7	3,2	....	7.35.	34.48,93	49,25			7.35.1,14	G.
Aug. 19	\odot 1 L. ....	....	....	33,2	47,2	1,6	15,1	9.54.29,1	53.47,40	47,73			9.53.59,72	G.
	\odot 2 L.	16,1	30,1	44,0	57,8	11,9	25,6	9.56.39,7	55.57,89	58,22			9.56.10,21	G.

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 1",13. From Aug. 17 = + 1",53. LEVEL Error from α Aquilæ, Aug. 7 = - 0",59. From Aug. 17 = - 0",26. AZIMUTH Error = + 6",25. From Aug. 17 = + 4",54.
 Aug. 12. 22^h. Hardy was put forward 1^m.

(a) Seemed double: a much fainter preceded 10^a. (b) The first of four. (c) Companion very minute.
 (d) Much clouded. (e) Seemed double: no other near. (f) Companion faint. (g) Faint from haze. (h) Alone.
 (i) Excessively faint: observation doubtful. (k) Cloudy. (l) Companion faint and close. (m) Mag. 8,9. The Mag. of Σ 2606 is 7,8.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Aug. 19	(a) Mercury 1 L.....	49,0	2,5	16,0	29,7	43,2	56,8	11.24.10,3	23.29,65	29,99		1,05	11.23.42,05	G.
Aug. 20	Mercury 1 L.....	44,0	57,6	....	....	38,3	....	11.28.	28.24,62	24,96		1,00	11.28.38,05	G.
	Arcturus.....	38,5	53,0	7,1	21,4	36,0	50,1	14.9.4,7	8.21,55	21,84	13,16		14.8.35,04	G.
	ε Bootis.....	13,4	28,8	44,0	59,1	14,4	....	14.38.45,0	37.59,19	59,44	13,15		14.38.12,66	G.
	δ Ursæ Minoris...	1,8	40,2	33,8	21,6	12,2	....	18.26.	22.22,77	21,63			18.22.35,01	G.
	Σ 2556.....	50,5	5,1	19,6	34,1	49,0	3,1	19.33.17,8	32.34,18	34,47			19.32.47,89	G.
	Σ 2576. np.....	39,8	55,9	11,8	28,0	44,2	0,1	19.40.16,2	39.28,00	28,24			19.39.41,67	G.
	α Aquilæ.....	19,6	33,2	46,8	0,4	14,2	27,9	19.43.41,4	43.0,51	0,85	13,51		19.43.14,28	G.
	β Aquilæ.....	48,6	2,2	15,8	29,1	43,1	56,2	19.48.10,0	47.29,29	29,64	13,45		19.47.43,08	G.
	* N.P.D. 57°. 8'.	20,6	36,9	53,0	8,8	25,2	41,1	19.52.57,2	52.8,98	9,22			19.52.22,66	G.
	Σ 2626.....	4,2	20,1	35,6	51,0	7,0	22,3	19.58.38,1	57.51,19	51,44			19.58.4,88	G.
	(b) Σ 2834.....	28,0	42,1	56,3	10,5	25,0	39,1	21.44.53,3	44.10,62	10,92			21.44.24,43	G.
	(c) Σ 2848. sp.....	22,4	36,1	49,3	2,5	16,7	30,0	21.50.43,2	50.2,89	3,22			21.50.16,74	G.
(a) 30 Aquarii.....	....	27,2	....	54,1	8,1	21,8	21.55.35,2	54.54,41	54,77			21.55.8,29	G.	
(a) α Aquarii.....	56,3	9,7	23,1	36,4	....	....	21.58.17,1	57.36,62	36,97	13,53		21.57.50,50	G.	
Aug. 22	δ Ursæ Minoris SP. ....	....	42,4	26,8	18,6	4,0	50,2	6.33.38,0	22.16,38	17,97		0,98	18.22.33,59	G.
	Sirius.....	20,1	34,3	48,1	2,1	16,5	30,5	6.38.44,6	38.2,32	2,72	15,60		6.38.18,35	G.
	Procyon.....	13,2	27,1	40,4	53,9	7,7	21,0	7.31.34,5	30.53,97	54,31	15,76		7.31.9,98	G.
	(c) Pollux.....	46,1	1,6	17,0	32,2	47,8	3,0	7.36.18,3	35.32,29	32,55	15,58		7.35.48,22	G.
Aug. 24	(d) ☉ 2 L.....	39,2	53,1	7,1	20,5	34,6	48,1	10.15.2,1	14.20,68	20,98			10.14.37,74	G.
Aug. 26	(a) ☉ 1 L.....	48,0	1,8	15,3	28,8	43,1	56,7	10.20.10,4	19.29,16	29,47		1,04	10.19.48,43	G.
	☉ 2 L.....	57,1	11,1	24,5	38,4	52,2	5,9	10.22.19,6	21.38,40	38,71			10.21.57,67	G.
	(a) 1 L.....	45,1	59,4	13,3	27,3	42,0	55,9	21.24.9,9	23.27,56	27,93			21.23.47,37	G.
	(a) α Pegasi.....	2,3	16,3	30,1	44,1	58,1	12,0	22.57.26,0	56.44,13	44,43	19,54			G.
	(a) α Andromedæ....	19,0	34,4	49,1	5,0	20,2	35,3	0.0.50,7	0.4,81	5,05	19,51			G.
	Venus 2 L.....	48,8	2,7	16,7	30,4	45,0	58,7	7.46.12,8	45.30,73	31,02			7.45.50,91	G.
Aug. 27	(e) Mercury 1 L.....	....	....	....	44,7	58,5	12,0	12.0.25,3	59.44,85	45,20		1,10	12.0.5,24	G.
	Polaris SP.....	26,8	57,0	....	56,0	23,2	47,6	13.29.17,4	3.52,56	56,49				G.
	Spica.....	59,6	13,4	27,0	40,7	54,6	8,2	13.17.22,1	16.40,81	41,17	20,09		13.17.1,27	G.
	Arcturus.....	31,4	46,0	0,1	14,3	29,0	43,1	14.8.57,4	8.14,47	14,74	20,16		14.8.34,88	G.
	(f) β Aquilæ.....	41,4	55,2	8,7	22,1	36,1	49,4	19.48.3,1	47.22,29	22,61	20,43		19.47.43,01	G.
	θ Capricorni.....	11,6	25,8	39,9	54,0	8,4	22,2	20.57.36,4	56.54,05	54,45			20.57.14,90	G.
	* N.P.D. 99°. 59'.	24,4	38,2	51,7	5,4	19,3	32,6	21.2.46,6	2.5,46	5,82			21.2.26,27	G.
	ζ Cygni.....	14,9	30,3	45,7	1,2	17,0	32,2	21.6.48,0	6.1,34	1,57			21.6.22,03	G.
	β Aquarii.....	23,6	37,0	50,4	4,1	18,0	31,2	21.23.45,1	23.4,20	4,55	20,45		21.23.25,02	G.
	ξ Aquarii.....	29,2	43,0	56,5	10,1	24,0	37,3	21.29.51,1	29.10,18	10,54			21.29.31,02	G.
	(a) λ Capricorni....	10,2	24,1	37,9	51,5	5,5	19,2	21.38.33,1	37.51,65	52,02			21.38.12,50	G.
	30 Aquarii.....	6,5	20,4	33,9	47,4	1,2	14,4	21.55.28,2	54.47,43	47,78			21.55.8,27	G.
	α Aquarii.....	49,2	3,0	16,2	29,6	43,3	56,5	21.58.10,1	57.29,70	30,04	20,50		21.57.50,54	G.
	(g) Σ 2878.....	45,2	59,0	12,4	26,1	39,7	53,2	22.7.7,1	6.26,10	26,42			22.6.46,92	G.
	(h) 1 L.....	33,1	47,1	1,1	14,9	29,0	42,8	22.16.56,5	16.14,93	15,28			22.16.35,79	G.
	η Aquarii.....	23,3	37,0	50,1	3,6	17,4	30,6	22.27.44,2	27.3,74	4,08			22.27.24,60	G.
	κ Aquarii.....	43,5	57,0	10,4	24,0	37,9	51,1	22.30.4,4	29.24,04	24,40			22.29.44,93	G.
	τ ¹ Aquarii.....	27,1	41,1	55,2	9,1	23,0	36,9	22.39.51,0	39.9,06	9,44			22.39.29,97	G.
	β Piscium.....	....	....	26,2	39,7	53,4	6,8	22.56.20,2	55.39,77	40,09			22.56.0,64	G.
	Castor.....	32,0	48,0	3,9	19,5	36,0	51,7	7.25.7,8	24.19,85	20,01	20,94	1,14	7.24.40,99	G.
Procyon.....	8,1	22,0	35,3	48,8	2,8	16,0	7.31.29,7	30.48,96	49,19	20,99		7.31.10,18	G.	
Pollux.....	41,3	56,7	11,9	27,1	42,6	58,0	7.36.13,1	35.27,25	27,44	20,81		7.35.48,43	G.	
Venus 2 L.....	42,1	56,0	9,7	23,7	38,2	52,0	7.48.6,1	47.23,98	24,20			7.47.45,20	G.	
Aug. 28	☉ 1 L.....	4,4	18,0	31,6	45,5	59,4	12,9	10.27.26,8	26.45,51	45,74			10.27.6,87	G.
	☉ 2 L.....	13,7	27,2	41,0	54,5	8,5	22,1	10.29.36,0	28.54,71	54,94			10.29.16,07	G.
	B.A.C. 7079. sp....	46,1	59,9	13,4	27,1	41,1	54,4	20.24.8,2	23.27,17	27,39			20.23.48,99	G.
	β Aquarii.....	22,3	36,0	49,3	3,0	16,7	30,1	21.23.43,7	23.3,02	3,27	21,73		21.23.24,92	G.
	ξ Aquarii.....	28,2	42,0	55,5	9,0	22,8	36,3	21.29.50,0	29.9,12	9,37			21.29.31,02	G.
	α Aquarii.....	48,1	1,8	15,0	28,4	42,1	55,4	21.58.9,0	57.28,55	28,80	21,74		21.57.50,47	G.

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 1",53. LEVEL Error = - 0",26. From Aug. 24 = - 0",61. AZIMUTH Error = + 4",54. From Aug. 26 = + 4",51. From Castor Aug. 27 = + 2",75.

(a) Cloudy. (b) Alone. (c) Faint from clouds. (d) The other Limb hid by clouds. (e) Faint and unsteady. (f) Very faint from clouds. (g) Clouded and faint: no star near this. The observation has been increased 1" for error in counting. (h) 2 L. not full.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Aug. 28	(a) Σ 2882. <i>sf.</i>	19,3	37,1	54,9	11,7	29,1	46,0	22. 8. 2,5	7. 11,52	11,68		1,14	22. 7. 33,36	G.
	Σ 2902. <i>p.</i>	47,9	7,0	25,6	44,4	3,5	22,2	22. 17. 41,4	16. 44,57	44,70			22. 17. 6,39	G.
	η Aquarii.	22,2	35,9	49,2	2,7	16,5	29,6	22. 27. 43,3	27. 2,78	3,03			22. 27. 24,73	G.
	κ Aquarii.	42,5	56,0	9,2	22,9	36,6	50,1	22. 30. 3,6	29. 22,99	23,25			22. 29. 44,95	G.
	τ^1 Aquarii.	26,0	40,1	54,0	8,0	22,0	35,9	22. 39. 50,0	39. 8,00	8,27			22. 39. 29,98	G.
	3 Piscium.	39,9	53,2	6,6	20,1	33,8	47,1	22. 53. 0,6	52. 20,19	20,44			22. 52. 42,16	G.
	β Piscium.	58,0	11,5	25,0	38,3	52,2	5,4	22. 56. 19,2	55. 38,52	38,75			22. 56. 0,47	G.
	) 2 L.	28,5	42,4	56,1	10,0	24,1	37,9	23. 9. 51,4	9. 10,06	10,31			23. 9. 32,04	G.
	κ Piscium.	57,7	11,3	24,9	38,1	52,0	5,2	23. 19. 18,9	18. 38,30	38,54			23. 19. 0,28	G.
	ι Piscium.	57,2	10,8	24,1	37,9	51,5	5,1	23. 32. 18,4	31. 37,86	38,09			23. 31. 59,84	G.
	α Andromedæ. ....	....	....	47,1	2,5	18,1	33,1	0. 0. 48,1	0. 2,51	2,70	21,90		0. 0. 24,47	G.
	Procyon.	7,1	21,0	34,3	47,9	1,5	14,9	7. 31. 28,4	30. 47,87	48,10	22,10	1,12	7. 31. 10,18	G.
	Pollux.	40,2	55,3	10,7	26,0	41,7	56,7	7. 36. 12,1	35. 26,10	26,29	21,98		7. 35. 48,37	G.
	Venus 2 L.	41,3	55,3	9,2	23,1	37,4	51,3	7. 50. 5,2	49. 23,27	23,49			7. 49. 45,58	G.
Aug. 29	☉ 1 L.	42,2	56,0	9,3	23,0	37,1	50,3	10. 31. 4,1	30. 23,15	23,38			10. 30. 45,60	G.
	☉ 2 L.	51,2	5,0	18,5	32,2	46,1	59,5	10. 33. 13,3	32. 32,26	32,49			10. 32. 54,71	G.
	Polaris SP.	23,6	58,0	....	57,0	24,2	45,8	13. 29. 20,6	3. 52,75	53,88			1. 4. 16,22	G.
	ϵ Bootis.	4,2	19,6	34,4	49,8	5,4	20,3	14. 38. 35,6	37. 49,90	50,08	22,35		14. 38. 12,49	G.
	(b) α^9 Libræ.	13,8	28,0	41,7	55,5	9,7	23,5	14. 42. 37,4	41. 55,66	55,93	22,44		14. 42. 18,35	G.
	Σ 2499. <i>sf.</i>	50,2	4,9	19,3	33,6	48,5	2,9	19. 12. 17,3	11. 33,82	34,02			19. 11. 56,65	G.
	Piazzi XIX. 85.	21,9	35,4	48,9	2,4	16,0	29,4	19. 14. 43,1	14. 2,45	2,70			19. 14. 25,33	G.
	ϵ^2 Sagittarii. ....	....	....	....	17,1	31,1	45,1	19. 33. 59,0	33. 16,99	17,26			19. 33. 39,90	G.
	α Aquilæ.	10,4	24,1	37,6	51,1	5,1	18,4	19. 43. 32,1	42. 51,26	51,49	22,80		19. 43. 14,14	G.
	β Aquilæ.	39,4	53,0	6,6	20,1	33,9	47,1	19. 48. 1,0	47. 20,16	20,39	22,63		19. 47. 43,04	G.
	(c) * N.P.D. 57°. 8'.	11,8	28,1	43,7	59,7	15,8	32,0	19. 52. 48,2	51. 59,90	0,06			19. 52. 22,72	G.
	κ Piscium.	57,0	10,3	24,0	37,4	51,2	4,6	23. 19. 17,8	18. 37,47	37,71			23. 19. 0,53	G.
	ι Piscium.	56,4	10,1	23,2	36,9	50,6	4,1	23. 32. 17,6	31. 36,99	37,21			23. 32. 0,04	G.
	(d)) 2 L. ....	....	....	....	42,0	55,8	9,5	23. 59. 23,3	58. 41,90	42,13			23. 59. 4,98	G.
d Piscium.	35,0	48,5	2,1	15,6	29,5	42,9	0. 12. 56,4	12. 15,71	15,94			0. 12. 38,80	G.	
Polaris.	31,6	....	27,0	58,0	....	....	1. 3.	3. 52,99	52,09			1. 4. 14,99	G.	
Aug. 30	☉ 1 L.	19,6	33,1	46,7	0,2	14,6	28,1	10. 34. 41,5	34. 0,55	0,79		1,14	10. 34. 24,17	G.
	☉ 2 L.	28,3	42,1	55,9	9,2	23,2	37,1	10. 36. 50,6	36. 9,49	9,73			10. 36. 33,11	G.
	(b) β Leonis.	2,2	16,2	30,1	44,1	58,3	12,0	11. 41. 26,0	40. 44,13	44,36	23,39		11. 41. 7,79	G.
	Mercury 1 L.	44,2	57,9	11,1	24,7	38,4	51,9	12. 12. 5,6	11. 24,83	25,09			12. 11. 48,55	G.
	(e) Polaris SP.	24,8	53,6	18,0	54,2	22,4	45,0	13. 29. 19,0	3. 51,00	50,31			1. 4. 13,81	G.
	Spica.	56,4	10,2	23,6	37,4	51,4	5,0	13. 17. 18,7	16. 37,53	37,80	23,43		13. 17. 1,31	G.
	α Aquilæ.	9,2	23,0	36,4	50,0	3,8	17,2	19. 43. 30,9	42. 50,08	50,32	23,96		19. 43. 14,14	G.
	β Aquilæ.	38,4	51,8	5,4	19,0	32,7	46,1	19. 47. 59,5	47. 18,99	19,23	23,78		19. 47. 43,05	G.
	(f) Σ 2626.	54,2	9,8	25,2	41,0	56,6	12,0	19. 58. 27,6	57. 40,92	41,12			19. 58. 4,95	G.
	Σ 2643. <i>sp.</i>	37,9	51,5	4,5	18,2	32,0	45,3	20. 4. 59,0	4. 18,35	18,61			20. 4. 42,44	G.
	Σ 2658. <i>np.</i>	5,1	27,2	49,5	11,8	34,2	56,0	20. 10. 18,3	9. 11,83	11,97			20. 9. 35,81	G.
	Σ 2671. <i>sf.</i>	3,1	26,5	49,9	13,2	37,1	0,0	20. 15. 23,7	14. 13,37	13,59			20. 14. 37,43	G.
	Σ 2681.	10,4	32,8	55,0	17,2	39,9	1,8	20. 19. 24,5	18. 17,37	17,59			20. 18. 41,43	G.
	Aug. 31	☉ 1 L.	37,5	51,4	5,0	10. 38. 18,7	37. 37,67	37,95		1,07	10. 38. 2,37	G.
☉ 2 L.		5,5	19,1	32,5	46,2	0,3	13,8	10. 40. 27,4	39. 46,40	46,68			10. 40. 11,10	G.
β Leonis.		1,0	15,1	29,0	43,0	57,2	10,9	11. 41. 25,1	40. 43,05	43,32	24,43			G.
Mercury 1 L.		21,4	35,3	48,5	2,0	16,0	29,2	12. 15. 42,9	15. 2,19	2,47			12. 15. 26,97	G.
α Ophiuchi.		38,4	52,2	6,1	19,8	33,9	47,4	17. 28. 1,2	27. 19,86	20,13	24,76			G.
Σ 2607. <i>sf.</i>		25,8	44,0	1,9	20,0	38,2	56,1	19. 53. 14,3	52. 20,05	20,28			19. 52. 45,12	G.
(g) 16 Vulpeculæ.		19,0	33,5	48,1	3,0	18,0	32,5	19. 55. 47,6	55. 3,11	3,36			19. 55. 28,20	G.
(h) Σ 2627.		55,7	9,1	22,8	36,2	50,0	3,2	20. 0. 16,7	59. 36,24	36,51			20. 0. 1,35	G.
Σ 2643. <i>sp.</i>		36,5	50,1	3,4	17,0	30,4	44,2	20. 4. 57,4	4. 17,00	17,28			20. 4. 42,13	G.
Σ 2658. <i>np.</i>		3,8	26,0	48,1	10,1	32,8	54,9	20. 10. 17,1	9. 10,41	10,63			20. 9. 35,48	G.
Σ 2671. <i>sf.</i>		1,9	25,2	48,4	11,9	35,7	58,9	20. 15. 22,3	14. 12,05	12,27			20. 14. 37,12	G.
ρ Capricorni.		54,0	8,1	22,4	36,4	51,1	5,0	20. 20. 19,1	19. 36,59	36,89			20. 20. 1,75	G.
5 Aquarii.		52,0	5,4	19,1	32,4	46,4	59,5	20. 44. 13,2	43. 32,58	32,86			20. 43. 57,73	G.
Sept. 1		α Ophiuchi.	37,3	51,1	4,9	18,5	32,5	46,1	17. 28. 0,0	27. 18,63	18,90	25,97	1,10		G.

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 1",53. LEVEL Error = - 0",61. From Aug. 30 = + 0",33. AZIMUTH Error = + 2",75.

(a) Very faint: intervals irregular. (b) Faint. (c) Star preceding Σ 2606: Mag. 8,9. (d) Hurried.
 (e) Before this observation the eye-end of the Telescope was slightly struck. (f) Seen double: observed as single.
 (g) Observed as single. (h) The middle of three.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Sept. 1	Castor.....	....	....	58,3	14,2	30,2	46,0	7.25.20	24.14,21	14,44	26,66	1,03	7.24.40,97	G.
	Procyon.....	2,6	16,2	29,8	43,2	57,1	10,3	7.31.24,0	30.43,32	43,60	26,69		7.31.10,13	G.
	Pollux.....	35,6	51,0	6,1	21,5	37,0	52,1	7.36.7,5	35.21,55	21,80	26,57		7.35.48,34	G.
	(a) Venus 2 L.....	40,4	54,6	8,3	22,2	36,7	50,4	7.59.4,5	58.22,45	22,72			7.58.49,27	C.
Sept. 2	☉ 1 L.....	9,7	23,1	36,8	50,4	4,3	17,9	10.45.31,6	44.50,55	50,83			10.45.17,50	G.
	☉ 2 L.....	18,2	32,0	45,3	59,0	13,0	26,2	10.47.40,1	46.59,12	59,40			10.47.26,07	G.
	Mercury 1 L.....	10,3	23,8	37,2	50,9	4,7	....	12.22.	21.50,92	51,21			12.22.17,95	G.
	Arcturus.....	24,7	39,2	53,4	7,7	22,3	36,5	14.8.51,0	8.7,83	8,09	26,74		14.8.34,91	C.
	α Herculis.....	26,3	40,2	54,0	7,8	22,1	35,9	17.7.50,0	7.8,05	8,33	26,81		17.7.35,27	C.
	α Ophiuchi.....	36,2	50,0	3,8	17,6	31,6	45,3	17.27.59,1	27.17,66	17,93	26,92		17.27.44,89	C.
	(b) B.A.C. 6525.....	....	....	....	18,3	34,0	49,2	18.58.4,6	57.18,44	18,77			18.57.45,79	C.
	Σ 2658. np.....	1,7	24,1	46,0	8,2	30,9	52,7	20.10.15,1	9.8,39	8,61			20.9.35,68	C.
	B.A.C. 7049.....	15,0	29,8	44,4	59,0	13,7	28,1	20.20.42,8	19.58,97	59,28			20.20.26,36	C.
	(c) α Pegasi.....	54,9	8,7	22,6	36,5	50,7	4,4	22.57.18,2	56.36,57	36,85	27,17		22.57.3,96	C.
	(d) * N.P.D. 26°. 12'.	16,0	46,5	17,0	49,0	19,0	49,0	23.57.19,2	55.49,39	49,62			23.56.16,82	C.
	Venus 2 L.....	9,0	23,0	37,1	51,1	5,3	....	8.1.	0.51,11	51,38			8.1.18,96	G.
Sept. 3	(e) ☉ 1 L.....	....	59,5	....	26,8	40,7	53,9	10.48.	43.26,81	27,09			10.48.54,79	C.
Sept. 4	(f) ☉ 1 L.....	22,0	35,5	49,1	2,6	16,3	29,9	10.52.43,6	52.2,72	3,10		0,97	10.52.31,75	C.
	(g) ☉ 2 L.....	30,5	44,1	57,7	11,3	25,0	38,6	10.54.52,1	54.11,34	11,72			10.54.40,37	C.
	μ ¹ Sagittarii.....	17,4	32,0	46,2	0,7	15,5	29,7	18.4.44,1	4.0,81	1,26	28,95			C.
Sept. 5	(h) ☉ 2 L.....	6,1	19,8	33,2	47,0	0,8	14,2	10.58.27,7	57.46,97	47,32		1,03	10.58.16,93	C.
	β Lyrae.....	....	....	....	52,1	8,3	....	18.44.40,5	43.52,14	52,39	29,90		18.44.22,33	C.
	ζ Aquilæ.....	6,1	20,0	33,8	47,6	1,6	15,3	18.58.29,2	57.47,66	48,00	29,99		18.58.17,95	C.
	(i) γ Aquilæ.....	43,0	56,7	10,2	24,0	38,1	51,3	19.39.5,1	38.24,06	24,40	29,96		19.38.54,38	C.
	ζ Tauri.....	8,7	23,2	37,7	52,0	6,4	21,0	5.28.35,5	27.52,08	52,39		1,04	5.28.22,81	C.
	(k) β Tauri.....	....	....	44,6	59,2	14,2	29,0	5.39.43,9	38.59,38	59,66			5.39.30,08	C.
	(l) α Orionis.....	35,0	48,7	2,1	15,6	29,5	43,0	5.46.56,5	46.15,77	16,12	30,53		5.46.46,55	C.
	δ 2 L.....	43,1	58,0	12,7	27,6	42,8	57,3	5.56.12,2	55.27,67	27,98			5.55.58,42	C.
	μ Geminorum.....	20,0	34,6	49,1	3,5	18,6	33,0	6.13.47,7	13.3,79	4,08			6.13.34,53	C.
	γ Geminorum.....	32,0	46,0	0,0	14,1	28,4	42,2	6.28.56,3	28.14,14	14,47			6.28.44,93	C.
	(i) Sirius.....	5,7	19,8	....	47,8	2,0	16,0	6.38.30,1	37.47,88	48,30	30,38		6.38.18,77	C.
Sept. 6	α Coronæ Borealis.	50,6	5,7	20,9	36,0	51,3	6,3	15.28.21,5	27.36,05	36,32	30,79		15.28.7,17	C.
	(i) α Herculis.....	....	....	49,8	3,7	17,8	31,7	17.7.	7.3,80	4,13	30,98		17.7.35,05	C.
	α Aquilæ.....	2,0	15,5	29,2	42,7	56,5	10,0	19.43.23,6	42.42,79	43,14	31,07		19.43.14,17	C.
	β Aquilæ.....	30,8	44,4	58,0	11,5	25,3	38,6	19.47.52,2	47.11,55	11,91	31,03		19.47.42,95	C.
	(m) Σ 2626.....	46,6	2,2	17,9	33,2	49,1	4,3	19.58.20,0	57.33,34	33,61			19.58.4,65	C.
	(n) Σ 2643.....	30,2	43,9	57,2	10,4	24,4	37,3	20.4.51,2	4.10,66	11,03			20.4.42,08	C.
	Σ 2658. np.....	57,3	19,5	42,1	4,1	26,7	48,5	20.10.10,8	9.4,15	4,31			20.9.35,36	C.
	B.A.C. 7049.....	11,1	25,7	40,2	54,7	9,8	24,1	20.20.38,8	19.54,91	55,36			20.20.26,42	C.
	(l) 5 Aquarii.....	45,7	59,2	12,9	26,1	40,1	53,4	20.44.7,0	43.26,34	26,73			20.43.57,80	C.
	Σ 2738. nf.....	6,6	21,1	35,1	49,1	3,2	17,0	20.51.31,0	50.49,02	49,35			20.51.20,43	C.
	(k) θ Capricorni.....	....	14,6	29,2	43,1	57,5	11,5	20.57.26,0	56.43,20	43,63			20.57.14,72	C.
	(o) * N.P.D. 100°. 50'.	10,0	24,1	37,4	51,2	5,0	....	21.2.	1.51,25	51,65			21.2.22,74	C.
	(p) ζ Cygni.....	....	19,3	35,0	50,4	6,3	21,5	21.6.37,1	5.50,52	50,79			21.6.21,88	C.
	(q) α Capricorni.....	23,9	38,2	52,0	6,2	20,5	34,7	21.13.48,6	13.6,30	6,73			21.13.37,83	C.
	β Aquarii.....	12,6	26,5	39,8	53,2	7,1	20,4	21.23.34,1	22.53,39	53,77	31,21		21.23.24,88	C.
	α Aquarii.....	38,7	52,1	5,6	19,1	32,7	46,0	21.57.59,6	57.19,12	19,48	31,07		21.57.50,61	C.
Sept. 7	δ Ophiuchi.....	0,8	14,4	27,8	41,2	55,0	8,3	16.6.21,8	5.41,34	41,71	31,78	0,98	16.6.13,57	C.
	Antares.....	37,5	52,4	7,3	22,3	37,6	52,4	16.20.7,5	19.22,44	22,90	31,81		16.19.54,77	C.
	μ ¹ Sagittarii.....	14,5	29,0	43,2	57,8	12,2	26,6	18.4.41,1	3.57,77	58,21	31,95		18.4.30,15	C.
	(r) δ Ursæ Minoris...	33,8	21,6	7,0	53,7	46,0	30,3	18.33.18,2	21.55,80	54,61				C.
	α ³ Capricorni.....	14,2	28,0	41,7	55,4	9,5	23,1	20.9.37,0	8.55,56	55,97	32,08		20.9.27,99	C.
	(s) ζ Cygni.....	....	18,6	34,1	49,6	5,2	....	21.6.36,2	5.49,63	49,90			21.6.21,96	C.
	α Aquarii.....	37,7	51,1	4,5	17,9	31,6	45,0	21.57.58,5	57.18,05	18,41	32,14		21.57.50,51	C.

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 1",53. LEVEL Error = + 0",33. From Sept. 5 = - 0",14.
 AZIMUTH Error = + 2",75. From Sept. 4 = + 4",80.

(a) Shaking. (b) Hurried. (c) Bad lamp-light. (d) The preceding of a coarsely double star, so excessively faint that the tenths of a second are quite uncertain. (e) Without the dark-glass: a doubtful observation. (f) Wires I. and II. have each been increased 1st: counting corrected by looking at the clock. (g) This limb very tremulous. (h) 1 L. clouded. (i) Doubtful from clouds. (k) Very faint. (l) Not good. (m) The larger seemed np: observed as single. (n) Badly observed: no star equally bright anywhere near this. (o) Extremely faint, invisible after Wire V. (p) Hurried at first. (q) Cloudy. (r) Very steady. (s) Doubtful from clouds.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.		
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.			
Sept. 10	(a) Mercury 1 L.....	....	....	....	....	3,2	16,6	12.42.30,3	41.49,41	49,75			12.42.24,53	C.
	(b) β Aquilæ.....	26,7	40,4	53,8	7,5	21,2	34,6	19.47.48,0	47.7,46	7,77	35,12		19.47.42,82	C.		
	(c) α^2 Capricorni.....	11,2	25,0	38,7	52,5	6,4	20,0	20.9.34,2	8.52,58	52,95	35,06		20.9.28,02	C.		
	μ Aquarii.....	2,2	15,8	29,1	43,1	56,7	10,2	20.44.24,0	43.43,02	43,37			20.44.18,46	C.		
	θ Capricorni.....	57,0	11,1	25,2	39,2	53,6	7,6	20.57.22,0	56.39,39	39,77			20.57.14,87	C.		
	(d) * N.P.D. 99°. 59'.	10,0	23,6	37,1	51,0	4,4	18,2	21.2.32,0	1.50,91	51,26			21.2.26,36	C.		
	β Aquarii.....	9,0	22,6	36,0	49,4	3,3	16,6	21.23.30,1	22.49,58	49,91	35,05		21.23.25,03	C.		
	ξ Aquarii.....	14,7	28,2	42,1	55,3	9,2	22,8	21.29.36,6	28.55,56	55,90			21.29.31,02	C.		
	(e) * N.P.D. 71°. 29'.	25,1	39,2	53,4	7,7	22,1	36,1	21.43.50,3	43.7,70	7,96			21.43.43,09	C.		
	α Aquarii.....	34,7	48,0	1,5	15,0	28,7	42,0	21.57.55,5	57.15,06	15,38	35,16		21.57.50,52	C.		
	Σ 2878.....	30,7	44,2	57,7	11,3	25,1	38,3	22.6.52,1	6.11,35	11,66			22.6.46,80	C.		
	B. xxii. 425.....	17,3	31,2	45,1	59,0	13,2	26,9	22.19.40,9	18.59,09	59,37			22.19.34,52	C.		
	(f) Σ 2916.....	5,5	23,1	41,0	58,4	17,0	34,4	22.24.52,3	23.58,82	58,98			22.24.34,14	C.		
Sept. 11	(g) τ^1 Aquarii.....	12,6	26,8	40,4	54,2	8,6	22,3	22.39.36,2	38.54,44	54,81			22.39.29,98	C.		
	(h) α Pegasi.....	47,0	0,8	14,6	28,5	42,6	56,3	22.57.10,3	56.28,59	28,86	35,21		22.57.4,04	C.		
	(i) Venus 2 L.....	50,9	4,8	18,6	32,7	47,1	0,7	8.24.14,9	23.32,82	33,09			8.24.8,64	C.		
	(k) \odot 1 L.....	29,0	42,5	55,9	9,4	23,3	36,8	11.17.50,4	17.9,62	9,93			11.17.45,60	G.		
	\odot 2 L.....	37,1	50,6	4,1	17,4	31,6	44,8	11.19.58,2	19.17,69	18,00			11.19.53,67	G.		
	Sept. 13	\odot 1 L.....	38,9	52,4	5,9	19,3	33,1	46,5	11.25.0,1	24.19,46	19,81			11.24.57,38	G.	
		\odot 2 L.....	47,0	0,4	13,5	27,4	41,1	54,4	11.27.8,1	26.27,42	27,77			11.27.5,34	G.	
	Sept. 15	α Arietis.....	4,2	33,1	48,1	3,0	17,3	1.58.32,0	57.48,09	48,37	39,81	0,97		G.	
	Sept. 16	(l) \odot 1 L.....	49,5	3,1	16,8	30,3	11.35.43,9	35.3,21	3,54			11.35.43,64	C.	
		\odot 2 L.....	30,7	44,0	57,4	11.37.51,8	37.11,11	11,44			11.37.51,54	C.	
		(m) Mercury 1 L.....	48,2	2,2	15,8	12.46.29,7	45.48,50	48,85			12.46.29,00	C.	
		(l) Arcturus.....	11,2	25,6	39,8	23,0	14.8.37,3	7.54,26	54,56	40,10				C.
		(l) Venus 2 L.....	59,6	13,5	27,8	41,4	8.43.55,6	43.13,61	13,91			8.43.54,86	C.	
Sept. 18	α Aquilæ.....	50,3	3,9	17,2	31,0	44,9	58,2	19.43.12,0	42.31,08	31,36	42,68	0,87	19.43.13,82	G.		
	β Aquilæ.....	19,3	33,0	46,4	0,0	13,7	27,0	19.47.40,5	46.59,99	0,28	42,50		19.47.42,74	G.		
	β Aquarii.....	1,2	15,0	28,5	42,0	55,7	9,1	21.23.22,6	22.42,02	42,34	42,57		21.23.24,86	G.		
	(n) α Andromedæ.....	....	....	27,0	42,2	57,8	12,8	0.0.28,3	59.42,35	42,55	42,29		0.0.25,16	C.
	Polaris.....	19,5	51,0	21,3	45,8	22,5	44,2	1.29.18,0	3.48,90	44,76			1.4.27,41	C.		
	(l) β Leonis.....	42,7	56,8	10,7	24,7	38,9	52,6	11.40.	40.24,72	24,98	42,83	0,80	11.41.7,75	C.		
	Sept. 19	(l) \odot 2 L.....	41,2	54,8	8,4	21,8	11.48.35,2	47.54,78	55,08			11.48.37,85	C.	
Antares.....		26,2	41,3	56,1	11,2	26,4	41,2	16.19.56,3	19.11,25	11,63	42,87		16.19.54,55	C.		
α Ophiuchi.....		20,0	33,6	47,5	1,3	15,3	29,0	17.27.42,7	27.1,35	1,62	42,92		17.27.44,58	C.		
(o) 4 Sagittarii.....		....	....	....	36,4	51,5	6,2	17.50.20,9	49.36,66	37,03			17.50.20,00	C.
μ^1 Sagittarii.....		3,3	17,7	32,0	46,6	1,2	15,4	18.4.30,0	3.46,60	46,96	42,98		18.4.29,94	C.		
ν^1 L.....		5,6	20,7	35,5	50,6	5,8	20,6	18.9.35,6	8.50,64	51,00			18.9.33,98	C.		
ν^1 Sagittarii.....		21,8	36,5	51,0	5,6	20,4	35,0	18.44.49,7	44.5,72	6,09			18.44.49,09	C.		
σ Sagittarii.....		57,0	11,6	26,1	40,7	55,3	9,8	18.55.24,2	54.40,68	41,04			18.55.24,05	C.		
B.A.C. 6525.....		16,1	31,6	47,0	2,2	17,7	33,0	18.57.48,4	57.2,29	2,70			18.57.45,71	C.		
(p) * N.P.D. 71°. 3'.		13,5	27,9	42,0	56,1	10,6	24,7	19.5.39,1	4.56,27	56,52			19.5.39,54	C.		
(q) B.A.C. 6590.....		44,8	59,1	12,8	26,6	41,1	55,0	19.10.9,0	9.26,92	27,26			19.10.10,28	C.		
(q) * N.P.D. 110°. 56'.		3,7	18,4	32,7	47,1	1,7	16,0	19.13.30,4	12.47,15	47,51			19.13.30,53	C.		
γ Aquilæ.....		29,8	43,5	57,2	10,8	24,6	38,2	19.38.52,0	38.10,88	11,15	43,02		19.38.54,18	C.		
α Aquilæ.....		49,7	3,4	17,0	30,5	44,3	57,9	19.43.11,6	42.30,63	30,91	43,12		19.43.13,95	C.		
β Aquilæ.....		18,8	32,3	45,8	59,2	13,1	26,5	19.47.40,0	46.59,39	59,68	43,09		19.47.42,72	C.		
α^2 Capricorni.....		3,0	16,9	30,6	44,5	58,4	12,0	20.9.26,0	8.44,49	44,83	43,07		20.9.27,88	C.		
ρ Capricorni.....		....	50,1	4,1	18,2	32,6	46,6	20.20.1,0	19.18,34	18,69			20.20.1,75	C.	
ϵ Aquarii.....		53,4	7,1	20,7	34,3	48,3	2,0	20.39.15,6	38.34,49	34,82			20.39.17,89	C.		
μ Aquarii.....		54,2	7,7	21,1	34,8	48,7	2,2	20.44.16,0	43.34,96	35,29			20.44.18,36	C.		
(l) N.P.D. 99°. 59'.		1,8	15,5	....	....	56,9	10,2	21.2.23,8	1.42,87	43,20			21.2.26,28	C.
B. xxi. 222.....	39,1	52,8	6,5	20,3	34,4	48,0	21.10.1,7	9.20,41	20,75			21.10.3,83	C.			
β Aquarii.....	1,0	14,5	28,0	41,3	55,2	8,5	21.23.22,2	22.41,54	41,86	43,04		21.23.24,95	C.			
α Aquarii.....	26,7	40,3	53,7	7,1	20,8	34,0	21.57.47,5	57.7,16	7,46	43,06		21.57.50,57	C.			

ILLUMINATED END OF AXIS EAST. COLLIMATION Error from Sept. 10 = + 1",01. LEVEL Error from Sept. 10 = - 0",48. From Sept. 13 = + 0",42. From Sept. 18 = - 0",39. AZIMUTH Error = + 4",80. From Sept. 15 = + 4",35.

The Transit was reversed Sept. 8. 23^h, and again Sept. 9. 4^h, for the determination of Collimation Error.

(a) Very obscure. (b) Flaring. (c) Not good. (d) Somewhat confused. (e) Of 9th magnitude: precedes a faint double star, which precedes Σ 2834. (f) Wire III. was written down 49,0. (g) This is Σ 2943. (h) Bad lamp-light. (i) Taken confusedly. Wires IV. V. and VI. were written down 33,7, 46,1, 59,7; counting then corrected. (j) Without the dark glass: dazzling. (k) Cloudy. (l) Cloudy. (m) Hurried: cloudy also. (n) Hurried and in an unsettled posture. This observation does not agree with the three preceding by (i). (o) In day-light: faint. (p) Mag. 8,9. Another of greater N.P.D. and a much fainter of less N.P.D. followed. (q) Neither good. The second star was judged to be of 6,7 Mag.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Sept. 19	Venus 2 L.	1,7	15,6	29,5	43,6	57,8	11,6	8.54.25,5	53.43,62	43,88		0,77	8.54.27,37	C.
	Regulus.....	40,5	54,3	8,1	21,7	36,0	49,5	10. 0. 3,4	59.21,94	22,21	43,55		10. 0. 5,73	C.
Sept. 20	(a) ☉ 1 L.	40,6	54,3	7,6	20,9	35,3	48,0	11.50. 1,7	49.21,21	21,51			11.50. 5,09	C.
	☉ 2 L.	49,1	2,6	16,1	29,6	43,5	56,6	11.52.10,2	51.29,68	29,98			11.52.13,56	C.
	(b) Polaris SP. ....	....	....	4,7	....	....	....	13.29. 8,0	3.39,31	44,45			1. 4.28,07	C.
	γ 1 L.	11,6	26,3	41,0	55,8	10,8	25,5	19.10.40,3	9.55,90	56,26			19.10.40,07	C.
	γ Aquilæ.....	29,2	43,0	56,2	10,0	23,9	37,3	19.38.51,0	38.10,09	10,37	43,78		19.38.54,20	C.
	α Aquilæ.....	49,1	2,6	16,2	29,8	43,6	57,1	19.43.11,0	42.29,92	30,20	43,81		19.43.14,03	C.
	(c) α Andromedæ.....	54,6	10,2	25,2	40,5	6,2	11,2	0. 0.26,6	59.40,65	40,85	44,00		0. 0.24,82	C.
	(d) Piazzi O. 208.	4,3	18,0	31,6	45,7	59,3	13,0	0.43.26,9	42.45,54	45,81			0.43.29,80	C.
	(e) 28 Ceti.....	54,4	8,2	22,0	35,5	49,6	....	0.57.	57.35,64	35,98			0.58.19,98	C.
	Venus 2 L.....	....	50,7	4,6	18,5	32,7	46,5	8.58. 0,6	57.18,63	18,89		0,71	8.58. 3,11	C.
	(f) γ 1 L. ....	....	....	....	11,2	25,6	40,6	20. 8.55,0	8.11,39	11,74			20. 8.56,30	C.
Sept. 21	ν Capricorni.....	46,5	0,7	15,0	29,2	43,6	57,7	20.31.12,0	30.29,25	29,60			20.31.14,17	C.
	ε Aquarii.....	52,0	5,7	19,2	32,9	46,8	0,3	20.39.13,9	38.32,98	33,31			20.39.17,88	C.
	μ Aquarii.....	52,4	6,1	19,7	33,3	47,2	0,7	20.44.14,5	43.33,42	33,75			20.44.18,32	C.
	* N.P.D. 100°. 50'	56,4	10,3	23,8	37,5	51,4	5,1	21. 2.18,8	1.37,62	37,96			21. 2.22,54	C.
	(g) Σ 2776.....	....	50,0	3,4	17,1	31,1	44,7	21. 6.58,6	6.17,29	17,63			21. 7. 2,21	C.
	B. xxi. 222.....	37,3	51,2	5,0	18,7	32,7	46,5	21.10. 0,4	9.18,83	19,17			21.10. 3,75	C.
	β Aquarii.....	59,3	12,7	26,3	40,0	53,5	7,1	21.23.20,6	22.39,93	40,25	44,63		21.23.24,84	C.
	α Aquarii.....	25,2	38,7	52,1	5,4	19,1	32,5	21.57.46,0	57. 5,57	5,87	44,63		21.57.50,48	C.
	12 Ceti.....	43,6	57,1	10,5	24,1	38,0	51,2	0.22. 4,7	21.24,17	24,50			0.22. 9,18	C.
	β Ceti.....	22,0	36,3	50,5	4,7	19,1	33,2	0.35.47,3	35. 4,73	5,08	44,62		0.35.49,77	C.
	(e) Piazzi O. 208.	3,4	....	31,2	45,0	....	....	0.43.26,1	42.44,89	45,16			0.43.29,85	C.
	B. O. 962.....	6,4	20,2	33,9	47,5	1,5	15,1	0.54.29,0	53.47,66	48,00			0.54.32,70	C.
Sept. 23	(e) ☉ 1 L.....	25,3	39,0	52,4	5,9	19,5	32,9	12. 0.46,4	0. 5,91	6,21		0,78	12. 0.52,13	G.
	(h) ☉ 2 L.....	33,2	47,0	0,3	14,0	27,5	41,0	12. 2.54,7	2.13,96	14,26			12. 3. 0,18	G.
	β Aquilæ.....	....	29,1	42,5	56,1	9,9	23,2	19.47.36,9	46.56,18	56,49	46,21			G.
	α² Capricorni.....	59,9	13,7	27,4	41,3	55,3	8,9	20. 9.22,9	8.41,35	41,71	46,14			G.
Sept. 24	(i) Venus 2 L.....	....	49,1	2,9	16,9	30,8	44,4	9. 8.58,4	8.16,79	17,07		0,77	9. 9. 3,68	G.
	Arcturus.....	4,7	19,0	33,2	47,3	2,0	16,3	14. 8.30,7	7.47,60	47,86	46,73		14. 8.34,63	G.
	ε Aquarii.....	49,4	3,2	17,0	30,3	44,4	58,0	20.39.11,5	38.30,55	30,90			20.39.17,88	G.
	(k) Σ 2776.....	33,8	47,4	1,0	14,8	28,7	42,3	21. 6.56,1	6.14,87	15,23			21. 7. 2,23	G.
	B. xxi. 222.....	35,1	49,0	2,4	16,3	30,5	44,1	21. 9.58,0	9.16,49	16,85			21.10. 3,85	G.
	(l) β Aquarii.....	....	10,2	23,9	37,4	51,1	4,5	21.23.18,1	22.37,43	37,77	47,09		21.23.24,78	G.
	α Aquarii.....	22,6	36,2	49,5	3,1	16,9	30,0	21.57.43,6	57. 3,14	3,46	47,02		21.57.50,48	G.
	γ Aquarii.....	12,2	26,0	39,2	52,4	6,5	19,7	22.13.33,2	12.52,75	53,08			22.13.40,11	G.
	η Aquarii.....	57,0	10,4	23,8	37,3	51,1	4,3	22.27.17,8	26.37,39	37,71			22.27.24,75	G.
	γ 1 L.....	7,2	21,2	34,9	48,9	2,8	16,3	22.47.30,1	46.48,78	49,12			22.47.36,17	G.
	γ Piscium.....	41,2	54,8	8,1	21,7	35,2	48,3	23. 9. 2,2	8.21,65	21,96			23. 9. 9,02	G.
	κ Piscium.....	32,5	46,2	59,4	13,1	26,9	40,2	23.18.53,8	18.13,17	13,49			23.19. 0,56	G.
Sept. 25	α Andromedæ.....	51,8	7,1	22,1	37,5	53,0	8,3	0. 0.23,4	59.37,60	37,82	47,05		0. 0.24,91	G.
	(m) Σ 25.....	14,8	28,5	42,8	56,7	11,0	24,3	0.10.38,4	9.56,64	56,92			0.10.44,01	G.
	12 Ceti.....	41,1	54,7	8,3	21,7	35,2	48,5	0.22. 2,1	21.21,66	22,01			0.22. 9,11	G.
	(n) * N.P.D. 78°. 19'	23,3	37,4	51,2	....	19,0	32,9	0.38.46,4	38. 5,02	5,31			0.38.52,42	G.
	ι Piscium. np.....	3,4	18,6	33,5	48,7	4,0	19,0	0.41.34,0	40.48,75	48,97			0.41.36,08	G.
	φ³ Ceti.....	47,5	1,4	15,2	29,0	43,1	56,4	0.48.10,4	47.29,00	29,36			0.48.16,48	G.
	(e) φ⁴ Ceti.....	30,8	44,4	58,1	12,0	26,1	39,5	0.50.53,2	50.12,02	12,38			0.50.59,50	G.
	28 Ceti.....	51,2	5,1	18,9	32,3	46,2	0,0	0.58.13,4	57.32,45	32,81			0.58.19,93	G.
	(i) ☉ 1 L.....	....	49,1	2,2	15,6	29,9	43,1	12. 7.56,6	7.15,99	16,31		0,71	12. 8. 3,81	G.
	☉ 2 L.....	....	....	....	24,1	37,5	51,1	12. 9.	9.24,06	24,38			12.10.11,88	G.
	ο Sagittarii.....	52,4	6,9	21,3	36,0	50,5	5,0	18.55.19,7	54.35,97	36,36			18.55.24,06	G.
	(o) H. C. 35760.....	57,5	14,0	30,4	47,1	3,9	20,2	18.58.37,0	57.47,16	47,34			18.58.35,04	G.
Σ 2466. np.....	17,0	32,3	48,0	3,3	19,1	34,2	19. 1.50,0	1. 3,42	3,63			19. 1.51,33	G.	
B.A.C. 6590.....	40,3	54,4	8,5	22,3	36,6	50,4	19.10. 4,5	9.22,44	22,81			19.10.10,52	C.	
* N.P.D. 110°. 56'	59,3	13,8	28,1	42,4	57,2	11,3	19.13.25,7	12.42,55	42,94			19.13.30,65	C.	

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 1",01. LEVEL Error = - 0",39. AZIMUTH Error = + 4",35.
From Sept. 23 = + 4",72.

(a) Both observations bad: that of 1 L. injured by stray light, owing to something amiss in the dark glass. For 2 L. another of greater opacity was used. (b) No more wires to be had for clouds. (c) Blazing. (d) Far from satisfactory. (e) Cloudy. (f) Heavily clouded: doubtful observation. (g) Hurried. The only star visible in a well-illuminated field. (h) Clouded at Wire 1. (i) Clouds passing. (k) The preceding star taken. (l) Hurried. (m) Cloudy: no star near this. (n) Very faint from haziness: the star is probably of 9,10 mag. (o) Σ 2448 was seen preceding.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Sept. 25	ϵ^1 Sagittarii	20,9	35,0	40,0	3,0	17,2	31,0	19.31.45,2	31.3,05	3,42		0,71	19.31.51,14	G.
	γ Aquilæ	25,0	38,8	52,3	6,0	19,9	33,5	19.38.47,1	38.6,09	6,38	47,68		19.38.54,10	G.
	α Aquilæ	45,0	58,5	12,1	25,9	39,5	53,0	19.43.6,8	42.25,83	26,13	47,80		19.43.13,85	G.
	β Aquilæ	14,0	27,4	41,1	54,7	8,2	21,7	19.47.35,2	46.54,61	54,92	47,75		19.47.42,65	G.
	α^2 Capricorni	12,1	26,0	39,7	53,9	7,4	20,9	20.9.21,3	8.39,81	40,17	47,65		20.9.27,91	G.
	(a) Σ 2776			59,4	14,2	28,1	41,5	21.6.55,4	6.14,00	14,36			21.7.2,12	G.
	B. XXI. 222	34,3	48,1	1,9	15,9	29,9	43,5	21.9.57,2	9.15,83	16,19			21.10.3,96	G.
	(b) Σ 2889	37,3	52,4	7,2	22,4	37,3	52,2	22.9.7,3	8.22,31	22,53			22.9.10,32	G.
	γ Piscium	40,6	54,2	7,4	20,9	34,8	48,1	23.9.1,5	8.21,08	21,39			23.9.9,21	G.
	κ Piscium	32,0	45,5	59,0	12,3	26,0	39,2	23.18.53,0	18.12,44	12,76			23.19.0,59	G.
	η 1 L.	35,3	49,2	3,1	16,9	30,9	44,2	23.36.58,1	36.16,82	17,13			23.37.4,97	G.
	ω Piscium	53,9	7,5	21,1	34,6	48,2	1,8	23.51.15,2	50.34,61	34,92			23.51.22,77	G.
	α Andromedæ	50,8	6,5	21,2	36,9	52,2	7,4	0.0.22,5	59.36,79	37,01	47,87		0.0.24,86	G.
	d Piscium	10,1	23,6	37,2	50,9	4,7	18,2	0.12.31,7	11.50,92	51,23			0.12.39,09	G.
	ϕ^1 Ceti		43,9	57,4	11,2	25,2	39,1	0.50.53,0	50.11,41	11,77			0.50.59,64	G.
	B. O. 962	3,2	17,0	30,7	44,3	58,2	12,0	0.54.25,9	53.44,47	44,83			0.54.32,71	G.
	(c) * N.P.D. 99°. 30'.	42,4	56,3	10,0	23,2	37,3	51,0	0.58.4,7	57.23,56	23,91			0.58.11,79	G.
	32 Ceti	57,9	11,2	25,1	38,9	52,6	6,1	1.2.20,1	1.38,85	39,20			1.2.27,08	G.
	Venus 2 L.	4,1	18,0	31,5	45,3	0,1	13,4	9.16.27,3	15.45,67	45,95		0,74	9.16.33,98	G.
	Regulus	36,1	50,0	3,6	17,4	31,3	45,0	9.59.59,0	59.17,49	17,77	48,11		10.0.5,82	G.
Sept. 26	\odot 1 L.	10,7	24,4	37,9	51,3	5,1	18,4	12.11.32,1	10.51,42	51,75			12.11.39,87	G.
	\odot 2 L.	19,2	33,0	46,2	59,6	13,3	26,8	12.13.40,4	12.59,79	0,12			12.13.48,24	G.
	Polaris SP.	4,0	39,4	0,8	40,6	5,8	31,2	13.29.6,0	3.35,40	40,13			1.4.28,27	G.
	Arcturus	3,1	17,5	31,8	46,1	0,5	14,8	14.8.29,0	7.46,12	46,39	48,18		14.8.34,57	G.
	α Coronæ Borealis.	33,0	48,1	3,2	18,3	33,7	48,8	15.28.3,9	27.18,43	18,67	48,11		15.28.6,89	G.
	H. C. 35760	56,5	13,2	29,9	46,2	3,1	19,3	18.58.36,1	57.46,33	46,53			18.58.34,85	G.
	Σ 2466. <i>np.</i>	16,1	32,0	47,1	2,7	18,3	33,8	19.1.49,2	1.2,75	2,98			19.1.51,31	G.
	(d) * N.P.D. 71°. 3'.			36,5	50,8	5,1	19,2	19.5.33,5	4.50,78	51,05			19.5.39,38	G.
	B.A.C. 6590	39,4	53,4	7,3	21,4	35,5	49,4	19.10.3,5	9.21,42	21,80			19.10.10,13	G.
	ρ^2 Sagittarii	17,4	31,6	45,9	0,1	14,2	28,3	19.12.42,7	12.0,03	0,42			19.12.48,75	G.
	ϵ^1 Sagittarii	20,1	34,1	48,1	2,2	16,3	30,2	19.31.44,4	31.2,21	2,59			19.31.50,93	G.
	β Aquilæ	13,3	27,0	40,2	54,0	7,5	21,0	19.47.34,6	46.53,94	54,26	48,36		19.47.42,61	G.
	B. XXI. 222	33,5	47,2	1,1	14,9	29,2	42,7	21.9.56,6	9.15,03	15,39			21.10.3,78	G.
	ω Piscium		6,6	20,1	33,7	47,5	1,1	23.51.14,4	50.33,80	34,12			23.51.22,60	G.
	33 Piscium	56,0	9,4	23,0	36,4	50,2	3,6	23.57.17,4	56.36,57	36,91			23.57.25,39	G.
	α Andromedæ	50,2	5,6	20,8	36,1	51,7	6,7	0.0.22,1	59.36,17	36,41	48,47		0.0.24,85	G.
	d Piscium	9,3	23,1	36,2	50,0	4,0	17,2	0.12.31,0	11.50,13	50,45			0.12.38,90	G.
	η 2 L.	40,7	54,2	8,2	22,1	36,1	50,1	0.28.4,1	27.22,22	22,54			0.28.10,99	G.
	δ Piscium	10,3	24,1	37,4	51,1	5,0	18,2	0.40.32,0	39.51,16	51,48			0.40.39,94	G.
	20 Ceti	37,2	51,1	4,3	17,7	31,3	44,8	0.44.58,2	44.17,80	18,14			0.44.6,60	G.
	(c) * N.P.D. 103°. 5'.	21,1	35,0	48,8	2,5	16,5	30,2	0.49.44,2	49.2,62	2,98			0.49.51,45	G.
	ϵ Piscium	26,0	39,4	53,1	6,6	20,3	33,9	0.54.47,6	54.6,70	7,02			0.54.55,49	G.
	* N.P.D. 99°. 30'.	42,0	55,6	9,2	22,7	36,9	50,2	0.58.4,1	57.22,97	23,32			0.58.11,79	G.
	32 Ceti	57,1	11,0	24,3	38,1	51,9	5,3	1.2.19,1	1.38,12	38,47			1.2.26,94	G.
	Polaris.	16,0	50,2	14,4	41,0	19,8	44,4	1.29.8,8	3.44,94	40,69			1.4.29,16	G.
	Venus 2 L.	51,3	5,4	19,1	33,0	47,1	0,8	9.20.14,7	19.33,07	33,36		0,86	9.20.22,22	G.
Sept. 27	\odot 1 L.	46,3	0,2	13,4	26,9	40,6	54,0	12.15.7,7	14.27,02	27,36			12.15.16,33	G.
	\odot 2 L.	54,7	8,2	21,8	35,4	49,1	2,4	12.17.15,8	16.35,34	35,68			12.17.24,65	G.
	(e) Polaris SP.	3,8	38,2	4,4	36,6	6,0	32,0	13.29.4,4	3.36,49	41,22			1.4.30,22	G.
	Arcturus	2,4	16,7	31,1	45,3	0,1	14,0	14.8.28,3	7.45,42	45,69	49,17		14.8.34,73	G.
	H. C. 35760	55,8	12,3	28,8	45,4	2,3	18,7	18.58.35,2	57.45,50	45,70			18.58.34,91	G.
	* N.P.D. 71°. 3'.	7,2	21,4	35,8	50,0	4,4	18,5	19.5.32,6	4.49,99	50,26			19.5.39,47	G.
	B.A.C. 6590	38,4	52,6	6,6	20,5	34,7	48,6	19.10.2,7	9.20,59	20,97			19.10.10,19	G.
	ρ^2 Sagittarii	16,4	30,8	45,0	59,2	13,5	27,6	19.12.41,9	11.59,20	59,59			19.12.48,81	G.
	ϵ^1 Sagittarii	19,2	33,4	47,3	1,2	15,5	29,4	19.31.43,5	31.1,36	1,74			19.31.50,97	G.
	γ Aquilæ	23,4	37,1	50,8	4,4	18,3	31,9	19.38.45,6	38.4,50	4,80	49,23		19.38.54,03	G.
	α Aquilæ	43,3	57,1	10,7	24,2	38,1	51,4	19.43.5,2	42.24,29	24,60	49,30		19.43.13,84	G.
	α^2 Capricorni	56,9	10,6	24,3	38,2	52,2	5,9	20.9.20,0	8.38,30	38,66	49,13		20.9.27,91	G.
	B. XXI. 222	32,5	46,7	0,5	14,2	28,2	41,8	21.9.55,9	9.14,26	14,62			21.10.3,91	G.

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 1",01. LEVEL Error = - 0",39. From Sept. 26 = - 0",18. AZIMUTH Error = + 4",72.

(a) The preceding star taken. (b) A close double, observed as single. The greater appeared to be north following.
(c) Mag. 8. (d) Considered to be of Mag. 8,9. (e) Unsteady.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Sept. 27	ε Cephei	20,4	44,5	8,8	33,1	57,6	21,9	22.	9.	46,1	8.	33,21	33,29		0,86	22.	9.	22,61	G.
	γ Aquarii	10,1	23,6	36,9	50,3	4,1	17,4	22.	13.	31,0	12.	50,49	50,83			22.	13.	40,15	G.
	Σ 2902. sp.	20,1	39,1	58,0	16,9	36,1	54,7	22.	17.	13,6	16.	16,93	17,08			22.	17.	6,41	G.
	(a) Σ 2905. np.	7,8	21,8	35,4	49,2	3,4	17,2	22.	19.	31,2	18.	40,43	49,72			22.	19.	30,05	G.
	(b) Σ 2916.	51,7	9,3	27,0	44,8	2,7	19,9	22.	24.	38,0	23.	44,78	44,96			22.	24.	34,29	G.
	(c) * N.P.D. 24°. 16'. ..	39,4	13,5	45,8	18,2	51,4	24,0	22.	36.	56,0	35.	18,33	18,32			22.	36.	7,66	G.
	β Pegasi	42,6	57,8	12,9	28,1	43,2	58,1	22.	56.	13,4	55.	28,02	28,26			22.	56.	17,61	G.
	33 Piscium	55,0	8,5	22,1	35,8	49,4	2,9	23.	57.	16,4	56.	35,73	36,07			23.	57.	25,46	G.
	α Andromedæ	49,4	4,8	20,1	35,2	50,7	5,9	0.	0.	21,1	59.	35,32	35,56	49,33		0.	0.	24,95	G.
	β Ceti	17,2	31,4	45,8	0,0	14,3	28,3	0.	35.	42,7	34.	59,96	0,35	49,40		0.	35.	40,76	G.
	* N.P.D. 78°. 19'. ..	21,2	35,1	48,6	2,4	16,4	30,2	0.	38.	43,9	38.	2,55	2,85			0.	38.	52,26	G.
	δ Piscium	9,6	23,2	36,9	50,3	4,1	17,5	0.	40.	31,3	39.	50,42	50,74			0.	40.	40,15	G.
	ε Piscium	25,1	39,0	52,2	6,9	19,8	33,1	0.	54.	46,8	54.	6,00	6,32			0.	54.	55,75	G.
	α Hydræ	26,9	40,4	54,0	7,5	21,2	34,8	9.	19.	48,3	19.	7,59	7,93	49,59	0,82	9.	19.	57,65	G.
	(d) Venus 2 L. ....	....	....	8,1	21,7	36,1	49,4	9.	24.	3,4	23.	21,86	22,16			9.	24.	11,88	G.
Sept. 28	⊙ 1 L.	22,0	35,9	49,1	2,8	16,2	29,9	12.	18.	43,2	18.	2,74	3,08			12.	18.	52,90	G.
	⊙ 2 L.	30,5	44,1	57,2	11,0	24,7	38,1	12.	20.	51,8	20.	11,06	11,40			12.	21.	1,22	G.
	B.A.C. 6590. ....	....	....	5,8	19,8	34,1	47,7	19.	10.	2,1	9.	19,90	20,28			19.	10.	10,33	G.
	ρ ³ Sagittarii	15,8	30,1	44,1	58,3	12,8	26,9	19.	12.	41,1	11.	58,45	58,84			19.	12.	48,90	G.
	γ Aquilæ	22,4	36,3	50,0	3,7	17,4	31,1	19.	38.	44,7	38.	3,66	3,96	50,05		19.	38.	54,03	G.
	α Aquilæ	42,6	56,2	9,8	23,1	37,1	50,6	19.	43.	4,1	42.	23,37	23,68	50,20		19.	43.	13,75	G.
	α Aquarii	19,4	33,1	46,4	0,1	13,3	27,1	21.	57.	40,4	56.	59,98	0,31	50,14		21.	57.	50,46	G.
	ε Cephei	19,6	43,7	8,1	32,1	56,8	20,8	22.	9.	45,1	8.	32,32	32,40			22.	9.	22,56	G.
	Σ 2902. sp.	19,2	38,1	57,1	15,7	35,1	53,9	22.	17.	12,8	16.	15,99	16,14			22.	17.	6,30	G.
	(e) Σ 2905. np. ....	....	20,4	34,8	48,8	2,3	16,1	22.	19.	30,1	18.	48,47	48,76			22.	19.	38,92	G.
	Σ 2916.	50,3	8,2	26,1	44,0	1,7	19,3	22.	24.	37,1	23.	43,82	44,00			22.	24.	34,17	G.
	(b) * N.P.D. 24°. 16'. ..	....	....	44,8	17,2	51,0	23,4	22.	36.	55,0	35.	17,49	17,47			22.	36.	7,64	G.
	β Pegasi	42,1	57,0	12,0	27,1	42,7	57,4	22.	56.	12,9	55.	27,32	27,56			22.	56.	17,74	G.
	(f) H. C. 47310.	25,1	41,5	58,1	15,3	32,2	48,5	0.	0.	5,5	59.	15,17	15,37			0.	0.	5,59	G.
	34 Piscium .....	....	....	1,5	15,5	29,4	42,9	0.	1.	56,6	1.	15,49	15,80			0.	2.	6,02	G.
	π Piscium	22,9	36,8	50,4	4,2	18,1	31,8	1.	28.	45,4	28.	4,23	4,53			1.	28.	54,79	G.
	β Arietis	33,2	47,6	2,0	16,1	30,8	45,1	1.	45.	59,2	45.	16,29	16,56			1.	46.	6,84	G.
	α Arietis	54,1	8,8	23,1	37,9	52,6	7,0	1.	58.	21,5	57.	37,86	38,11	50,31		1.	58.	28,40	G.
	δ 2 L.	33,1	47,1	1,4	15,8	30,2	44,2	2.	6.	58,5	6.	15,76	16,05			2.	7.	6,34	G.
	ν Arietis	28,7	43,7	58,1	12,2	27,1	41,2	2.	29.	55,9	29.	12,42	12,68			2.	30.	2,97	G.
	π Arietis	7,8	21,9	35,7	49,9	4,1	18,1	2.	40.	32,1	39.	49,95	50,23			2.	40.	40,52	G.
Sept. 29	β Ceti	15,9	30,1	44,1	58,4	13,1	27,1	0.	35.	41,2	34.	58,56	58,95	50,81	0,80				G.
Sept. 30	⊙ 1 L.	34,2	47,9	1,2	14,8	28,4	41,8	12.	25.	55,2	25.	14,79	15,13		0,77	12.	26.	6,49	G.
	⊙ 2 L.	43,0	56,3	9,9	23,5	37,1	50,4	12.	28.	4,1	27.	23,48	23,82			12.	28.	15,18	G.
	Arcturus .....	....	....	....	43,0	57,4	11,5	14.	8.	26,0	7.	42,96	43,23	51,31		14.	8.	34,64	G.
	α Coronæ Borealis.	29,7	44,9	0,0	15,1	30,5	45,4	15.	28.	0,7	27.	15,19	15,43	51,29		15.	28.	6,89	G.
	B.A.C. 6590.	36,1	50,2	4,1	18,0	32,1	46,1	19.	10.	0,1	9.	18,10	18,48			19.	10.	10,05	G.
	* N.P.D. 110°. 56'. ..	55,0	9,3	23,8	38,1	52,7	7,1	19.	13.	21,5	12.	38,22	38,62			19.	13.	30,20	G.
	γ Aquilæ	21,1	34,4	48,3	2,0	15,7	29,2	19.	38.	43,0	38.	1,96	2,26	51,72		19.	38.	53,85	G.
	α Capricorni	54,2	8,1	21,9	35,6	49,7	3,2	20.	9.	17,2	8.	35,70	36,06	51,68		20.	9.	27,67	G.
	β Aquarii	52,1	5,7	19,1	32,6	46,4	59,8	21.	23.	13,4	22.	32,74	33,08	51,71		21.	23.	24,73	G.
	ε Cephei .....	....	....	6,3	30,6	55,1	19,1	22.	9.	43,3	8.	30,64	30,72			22.	9.	22,39	G.
	(g) Σ 2905. np.	5,3	19,1	33,0	46,9	1,0	14,8	22.	19.	28,3	18.	46,92	47,21			22.	19.	38,89	G.
	* N.P.D. 24°. 16'. ..	....	....	43,4	15,2	48,8	21,9	22.	36.	55,0	35.	16,07	16,05			22.	36.	7,73	G.
	β Ceti	15,0	29,1	43,2	57,4	12,1	26,0	0.	35.	40,3	34.	57,59	57,98	51,79		0.	35.	49,73	G.
	Venus 2 L.	16,2	30,2	44,1	58,0	11,9	25,4	9.	35.	39,4	34.	57,89	58,19			9.	35.	50,23	G.
Oct. 2	(h) ⊙ 2 L.	56,1	9,6	....	36,4	49,5	....	12.	35.	17,4	34.	37,24	37,58		0,81	12.	35.	30,40	G.
	β Aquarii	50,6	4,1	17,6	31,1	45,1	58,3	21.	23.	12,0	22.	31,26	31,60	53,17		21.	23.	24,71	G.
	α Aquarii	16,5	30,1	43,4	57,1	10,7	23,9	21.	57.	37,2	56.	56,99	57,32	53,10		21.	57.	50,45	G.
	α Andromedæ	45,5	1,1	16,1	31,2	47,1	2,1	0.	0.	17,3	59.	31,49	31,73	53,17		0.	0.	24,93	G.
	(i) De Vico's Comet. .	8,0	21,3	34,7	48,5	1,7	15,2	1.	11.	28,8	10.	48,32	48,67			1.	11.	41,91	G.

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 1",01. LEVEL Error = - 0",18. AZIMUTH Error = + 4",72.

(a) The first five wires have been diminished 1". The observer was unwell, and felt difficulty in keeping the count. (b) Excessively faint.
(c) Mere guess, star so faint. A brighter of 3' greater N.P.D. preceded. (d) Not good: hurried. (e) Difficult, so faint. The counting being found 1" short, the observation has been corrected accordingly. The observer felt difficulty in keeping the count, as on the preceding night. (f) 'Mag. 8.9.' (g) The seconds in this observation are right: those in the observations of Sept. 27 and Sept. 28 were uncertain. (h) Interrupted by clouds. (i) Observed in a dark field with the collimating eye-piece, the wires being illumined by means of its reflector. For a description of this eye-piece, see Introduction.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Oct. 3	α Pegasi.....	28,0	41,9	55,8	9,5	23,8	37,4	22	56	51,2	56	9,66	9,95	54,10	0,89	22	57	3,96	G.
	α Andromedæ. ...	44,9	0,1	15,2	30,4	46,1	1,1	0	0	16,2	59	30,58	30,83	54,07		0	0	24,88	G.
	β Ceti.....	12,8	27,1	41,1	55,2	9,8	23,8	0	35	38,2	34	55,43	55,82	53,96		0	35	49,89	G.
	* N.P.D. 103°. 5'.	15,9	29,8	43,4	57,0	11,2	24,9	0	49	38,9	48	57,30	57,67			0	49	51,75	G.
	B. o. 962.....	57,1	11,0	24,6	38,1	52,1	5,9	0	54	19,7	53	38,36	38,73			0	54	32,81	G.
	* N.P.D. 99°. 30'.	36,4	50,1	3,9	17,4	31,2	44,7	0	57	58,5	57	17,46	17,82			0	58	11,90	G.
	η Ceti.....	13,5	27,2	40,9	54,4	8,5	22,1	1	0	35,9	59	54,64	55,01			1	0	49,10	G.
	B. i. 51.....	20,1	33,8	47,5	1,0	14,8	28,2	1	3	42,0	3	1,06	1,42			1	3	55,51	G.
	37 Ceti.....	2,0	15,4	29,0	42,7	56,2	9,8	1	6	23,5	5	42,66	43,02			1	6	37,11	G.
	(a) De Vico's Comet..	8,2	21,3	34,7	48,1	1,9	15,2	1	12	29,0	11	48,35	48,70			1	12	42,79	G.
	θ Ceti.....	....	....	10,0	23,6	37,2	50,9	1	16	4,5	15	23,61	23,97			1	16	18,06	G.
	α Arietis.....	50,2	5,1	19,4	34,1	48,9	3,1	1	58	18,0	57	34,12	34,38	54,11		1	58	28,50	G.
Oct. 4	(b) \odot 1 L.....	2,1	15,6	29,0	42,9	56,4	9,9	12	40	23,5	39	42,78	43,13		0,91	12	40	37,68	G.
	\odot 2 L.....	11,1	24,5	38,1	51,5	5,3	....	12	42	....	41	51,64	51,99			12	42	46,54	G.
	α Aquilæ.....	37,6	51,2	5,1	18,4	32,2	45,6	19	42	....	42	18,49	18,81	54,97		19	43	13,63	G.
	α^2 Capricorni.....	51,1	4,9	18,7	32,4	46,5	0,1	20	9	14,1	8	32,55	32,92	54,76		20	9	27,75	G.
	(c) α Aquarii.....	14,7	28,2	41,9	55,2	9,0	22,0	21	57	35,7	56	55,24	55,58	54,82		21	57	50,48	G.
	(d) Σ 3062.....	3,5	29,1	53,7	19,2	44,4	9,2	23	58	34,7	57	19,12	19,22			23	58	14,20	G.
	Σ 1.....	....	....	42,0	58,7	15,8	....	0	0	48,9	59	58,80	59,01			0	0	53,99	G.
Oct. 5	(e) De Vico's Comet..	58,4	11,9	25,1	39,1	52,5	5,7	1	14	19,0	13	38,82	39,17		0,81	1	14	35,05	G.
	α Arietis.....	48,8	3,1	17,6	32,2	47,1	1,5	1	58	16,1	57	32,35	32,61	55,91					G.
Oct. 6	δ Cancri.....	12,0	26,3	40,4	54,7	9,1	23,1	8	35	37,4	34	54,71	54,99		0,68	8	35	51,88	G.
	γ 2 L.....	13,1	27,2	41,2	55,3	9,6	23,4	9	2	37,4	1	55,31	55,62			9	2	52,53	G.
	α Hydræ.....	19,7	33,2	46,9	0,4	14,1	27,6	9	19	41,2	19	0,45	0,80	56,94		9	19	57,71	G.
	Venus 2 L.....	3,4	17,2	31,0	44,8	58,8	12,4	9	59	26,2	58	44,83	45,14			9	59	42,07	G.
	β Leonis.....	28,9	42,9	56,7	10,5	25,0	38,6	11	40	52,5	40	10,73	11,02	56,96		11	41	8,00	G.
	Mercury 2 L.....	....	....	51,2	5,1	19,0	32,1	11	57	45,8	57	5,17	5,51			11	58	2,50	G.
Oct. 7	(b) Polaris SP.....	....	28,8	....	29,0	57,4	30,2	13	28	58,8	3	31,99	36,45			1	4	33,47	G.
	ϵ Bootis.....	29,1	44,2	59,4	14,7	30,1	45,1	14	38	0,4	37	14,71	14,96	56,96		14	38	12,02	G.
	β Aquarii.....	46,4	0,0	13,2	26,9	40,7	54,1	21	23	7,8	22	27,02	27,37	57,34		21	23	24,63	G.
	(f) B. xxii. 425.....	55,1	9,1	22,6	36,8	50,9	4,5	22	19	18,5	18	36,79	37,09			22	19	34,37	G.
	Polaris.....	8,4	42,0	11,8	41,0	15,0	35,0	1	29	12,2	3	40,77	36,80			1	4	34,16	G.
	(g) De Vico's Comet..	38,8	52,2	5,7	19,4	33,2	46,5	1	16	0,5	15	19,48	19,83			1	16	17,19	G.
	α Arietis.....	47,1	1,7	16,3	30,8	45,5	0,0	1	58	14,8	57	30,89	31,15	57,40		1	58	28,54	G.
Oct. 8	Arcturus.....	53,6	8,0	22,4	36,7	51,2	5,4	14	8	19,5	7	36,69	36,97	57,54	0,73				G.
	α Andromedæ....	40,8	56,1	11,4	26,7	42,2	57,4	0	0	12,8	59	26,77	27,02	57,89					G.
Oct. 9	(h) \odot 1 L.....	15,5	29,2	42,8	56,4	10,1	23,6	12	58	37,2	57	56,40	56,75			12	58	55,03	G.
	\odot 2 L.....	25,1	38,7	52,1	5,8	19,5	33,0	13	0	46,7	0	5,84	6,19			13	1	4,47	G.
Oct. 10	(h) \odot 1 L.....	55,7	9,4	22,9	36,5	50,2	3,6	13	2	17,4	1	36,53	36,88		0,70	13	2	35,89	G.
	\odot 2 L.....	5,2	19,0	32,3	46,0	59,9	13,2	13	4	26,9	3	46,07	46,42			13	4	45,43	G.
	γ Aquilæ.....	13,2	26,9	40,5	54,2	8,1	21,6	19	38	35,4	37	54,27	54,58	59,23		19	38	53,78	G.
	α Aquilæ.....	33,1	46,9	0,2	14,0	27,8	41,2	19	42	54,9	42	14,01	14,33	59,35		19	43	13,54	G.
	α^2 Capricorni.....	46,7	0,4	14,1	28,0	42,0	55,6	20	9	9,4	8	28,03	28,40	59,18		20	9	27,62	G.
	α Pegasi.....	22,8	36,6	50,4	4,4	18,5	32,1	22	56	46,1	56	4,41	4,71	59,30		22	57	4,01	G.
	Σ 3062.....	....	24,6	49,3	14,5	40,1	5,0	23	58	30,2	57	14,72	14,82			23	58	14,15	G.
	α Andromedæ....	....	....	10,1	25,4	40,9	56,1	0	0	11,3	59	25,47	25,72	59,18		0	0	25,05	G.
	20 Ceti.....	26,7	40,2	53,6	7,0	20,5	34,0	0	44	47,4	44	7,06	7,41			0	45	6,76	G.
	ϕ^3 Ceti.....	35,5	49,2	3,1	16,9	30,9	44,4	0	47	58,1	47	16,87	17,24			0	48	16,59	G.
	ϕ^4 Ceti.....	18,4	32,2	46,0	59,9	13,9	27,3	0	50	41,1	49	59,83	0,20			0	50	59,55	G.
	B. o. 962.....	51,9	5,4	19,2	32,9	47,0	0,5	0	54	14,3	53	33,04	33,41			0	54	32,77	G.
	* N.P.D. 99°. 30'.	31,3	44,9	58,5	12,0	26,0	39,5	0	57	53,4	57	12,24	12,60			0	58	11,96	G.
	η Ceti.....	8,1	22,0	35,5	49,2	3,1	16,9	1	0	30,5	59	49,33	49,70			1	0	49,06	G.
	(i) B. i. 51.....	14,9	28,5	42,1	55,9	9,7	23,0	1	3	36,9	2	55,86	56,22			1	3	55,58	G.
	(k) 37 Ceti. sf.....	56,5	10,2	23,9	37,4	51,2	4,9	1	6	18,4	5	37,50	37,86			1	6	37,22	G.

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 1",01. LEVEL Error from Oct. 3 = - 0",03. AZIMUTH Error from Oct. 3 = + 4",73.

(a) Faint, but observed satisfactorily. (b) Clouds. (c) Much clouded. (d) Seen double, but observed as single.
 (e) Faint and rather indefinite. (f) Faint. 'Mag. 9.' (g) Observation uncertain on account of the faintness of the object.
 (h) Hazy. (i) Clouded at Wire VI. (k) Distant components.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.	Observer.	
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.		
Oct. 10	B. 1. 186.....	8,0	21,6	35,1	48,7	2,5	16,0	1. 11. 29,4	10. 48,76	49,11		0,70	1. 11. 48,47	G.	
	(a) B. 1. 228.....	38,2	51,9	5,3	18,9	32,5	46,0	1. 13. 59,5	13. 18,90	19,26			1. 14. 18,63	G.	
	(b) De Vico's Comet..	53,0	6,3	19,8	33,2	46,7	59,9	1. 18. 13,5	17. 33,21	33,56			1. 18. 32,93	G.	
	Venus 2 L.....	15,7	29,4	43,1	56,7	10,9	24,2	10. 15. 38,1	14. 56,87	57,19		0,64	10. 15. 56,78	G.	
	β Leonis.....	26,1	40,1	54,0	8,1	22,1	36,0	11. 40. 50,0	40. 8,06	8,35	59,69		11. 41. 7,98	G.	
	Mercury 2 L.....	33,5	47,1	0,3	14,0	27,7	41,1	12. 3. 54,6	3. 14,04	14,38			12. 4. 14,02	G.	
Oct. 11	⊙ 1 L.....	36,0	49,4	2,9	17,0	....	44,1	13. 5. 58,0	5. 16,86	17,21			13. 6. 16,88	G.
	⊙ 2 L.....	....	....	13,1	26,8	40,6	54,1	13. 8. 8,0	7. 26,90	27,25			13. 8. 26,92	G.
	Arcturus.....	51,6	6,0	20,2	34,5	49,0	3,2	14. 8. 17,6	7. 34,59	34,87	59,64		14. 8. 34,57	G.	
	ε Bootis.....	....	41,6	56,7	12,0	27,4	42,4	14. 37. 57,6	37. 12,01	12,26	59,64		14. 38. 11,97	G.
	α Andromedæ....	....	....	....	24,5	40,0	55,1	0. 0. 10,7	59. 24,63	24,88	60,02		0. 0. 24,84	G.
Oct. 13	α Arietis.....	43,1	57,9	12,2	27,0	41,9	56,1	1. 58. 11,0	57. 27,03	27,29	61,33	0,68		B.	
Oct. 15	β Ceti.....	4,0	18,2	32,2	46,8	1,0	15,0	0. 35. 29,5	34. 46,67	47,14	62,68	0,61		B.	
Oct. 16	Venus 2 L.....	56,2	9,4	23,0	36,5	50,2	....	10. 39.	39. 36,71	37,09		0,59	10. 40. 40,51	B.
	Mercury 2 L.....	0,8	14,1	27,9	41,0	55,0	....	12. 26.	26. 41,27	41,68			12. 27. 45,15	B.
Oct. 17	⊙ 1 L.....	50,8	4,9	18,0	31,8	45,6	59,0	13. 28. 12,8	27. 31,85	32,28			13. 28. 35,77	B.	
	⊙ 2 L.....	1,4	15,0	28,9	42,7	56,9	....	13. 30. 23,6	29. 42,64	43,07			13. 30. 46,56	B.
	Arcturus.....	47,8	2,0	16,2	30,9	45,1	59,4	14. 8. 13,8	7. 30,75	31,08	63,42		14. 8. 34,59	B.	
	α Pegasi.....	18,0	32,0	45,9	59,9	13,9	27,9	22. 56. 41,8	55. 59,92	0,27	63,69		22. 57. 4,00	B.	
	α Ceti.....	27,9	41,0	54,8	8,0	22,0	35,0	2. 53. 48,9	53. 8,23	8,62	63,93		2. 54. 12,42	B.	
Oct. 20	α Arietis.....	38,9	53,1	8,0	22,5	37,2	52,0	1. 58. 6,4	57. 22,59	22,90	65,80	0,75		B.	
Oct. 22	Venus 2 L.....	55,0	8,5	22,1	35,6	49,3	....	11. 4.	4. 35,69	36,08		0,78	11. 5. 43,85	G.
	β Leonis.....	18,2	32,1	46,0	0,0	14,2	27,9	11. 40. 42,0	40. 0,06	0,41	67,83		11. 41. 8,20	G.	
	Polaris SP.....	43,8	18,0	....	20,4	47,8	14,4	13. 28. 50,0	3. 16,65	23,13				G.
Oct. 23	⊙ 1 L.....	25,7	39,7	53,3	7,0	21,1	34,4	13. 50. 48,7	50. 7,13	7,58			13. 51. 15,44	G.	
	⊙ 2 L.....	37,5	51,4	5,1	19,0	33,1	46,6	13. 53. 0,5	52. 19,03	19,48			13. 53. 27,34	G.	
	α Coronæ Borealis.	12,9	28,1	43,1	58,3	13,5	28,5	15. 27. 43,8	26. 58,32	58,61	67,87		15. 28. 6,52	G.	
	α Pegasi.....	13,8	27,8	41,6	55,2	9,4	23,2	22. 57. 36,8	56. 55,40	55,75	8,15		22. 57. 3,91	G.	
Oct. 26	α Aquarii.....	58,9	12,4	26,0	39,3	53,0	6,2	21. 58. 19,8	57. 39,37	39,79	10,35	0,91	21. 57. 50,14	G.	
	α Pegasi.....	11,3	25,2	39,0	52,9	7,1	20,9	22. 57. 34,8	56. 53,04	53,40	10,47		22. 57. 3,79	G.	
	α Andromedæ....	28,2	43,7	59,0	14,1	29,5	44,7	0. 1. 0,0	0. 14,18	14,49	10,36		0. 0. 24,92	G.	
Oct. 27	(e) B. 1. 497.....	....	....	1,8	15,1	28,9	42,1	1. 28. 55,7	28. 15,23	15,64		0,96	1. 28. 27,10	G.
	α Arietis.....	33,1	47,7	2,2	17,1	31,7	46,1	1. 59. 0,8	58. 16,96	17,28	11,48			G.	
	(f) Venus 2 L.....	56,3	10,0	23,3	37,1	50,8	4,1	11. 27. 17,5	26. 37,02	37,41		1,00	11. 26. 49,26	G.	
	β Leonis.....	14,0	28,2	42,2	56,1	10,2	24,0	11. 41. 38,0	40. 56,10	56,46	11,87		11. 41. 8,32	G.	
Oct. 28	α Pegasi.....	9,3	23,3	37,1	51,0	5,1	18,9	22. 57. 33,1	56. 51,12	51,48	12,37		22. 57. 3,81	G.	
	α Andromedæ....	26,1	41,8	57,0	12,0	27,6	42,9	0. 0. 58,1	0. 12,22	12,53	12,31		0. 0. 24,90	G.	
	Venus 2 L.....	9,8	23,1	36,8	50,3	4,1	17,5	11. 31. 31,1	30. 50,39	50,79		1,02	11. 31. 3,66	G.	
	β Leonis.....	13,1	27,1	41,1	55,1	9,2	23,1	11. 41. 37,1	40. 55,11	55,47	12,88			G.	
Oct. 30	Spica.....	5,0	18,7	32,3	46,0	59,9	13,4	13. 17. 27,0	16. 46,04	46,49	14,84	0,96	13. 17. 1,38	G.	
Oct. 31	⊙ 1 L.....	10,1	24,0	37,9	51,8	6,0	19,8	14. 22. 33,7	21. 51,91	52,37			14. 22. 7,31	G.	
	⊙ 2 L.....	23,7	37,7	51,4	5,3	19,6	33,3	14. 24. 47,2	24. 5,46	5,92			14. 24. 20,86	G.	
	(g) B. 1. 568.....	9,8	23,5	36,8	50,1	3,7	17,2	1. 32. 30,8	31. 50,28	50,68			1. 32. 6,04	G.	
	B.A.C. 632.....	17,0	31,1	45,1	59,3	13,5	27,5	1. 55. 41,7	54. 59,32	59,68			1. 55. 15,08	G.	
	α Arietis.....	29,2	43,9	58,3	13,1	28,0	42,2	1. 58. 56,8	58. 13,08	13,40	15,38		1. 58. 28,80	G.	
	27 Arietis.....	23,1	37,1	51,1	5,2	19,4	33,3	2. 22. 47,6	22. 5,26	5,62			2. 22. 21,02	G.	
	H. C. 4925.....	....	52,2	6,2	20,1	34,3	48,3	2. 32. 2,4	31. 20,24	20,60			2. 31. 36,00	G.
	α Ceti.....	16,2	29,8	43,3	56,8	10,5	24,0	2. 54. 37,2	53. 56,83	57,23	15,49		2. 54. 12,63	G.	

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 1",01. LEVEL Error = - 0",03. From Oct. 26 = + 0",22.
 AZIMUTH Error = + 4",73. From Oct. 15 = + 6",00.
 Oct. 23. 1½^h, Hardy was put forward 1^m.

(a) 'Mag. 8.' (b) Faint, but observation pretty good. (c) Clouds passing, and Limbs very uneven. (d) Clouds.
 (e) Estimated to be of 8th Mag. (f) Bad definition. (g) Faint.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.				
Nov. 4	α Aquarii.....	50,4	4,1	17,4	30,9	44,4	58,0	21. 58. 11,4	57. 30,95	31,19	18,83	0,85				G.	
Nov. 6	(a) \odot 2 L.	1,9	16,0	30,1	44,0	58,2	12,1	14. 48.	47. 44,08	44,35				14. 48. 4,62		G.	
	(b) Venus 2 L.....	....	44,0	57,2	10,8	24,5	37,9	12. 9. 51,4	9. 10,88	11,11		0,72	12. 9. 31,73		G.	
Nov. 7	(c) \odot 1 L.	46,1	0,2	14,2	28,2	42,8	56,6	14. 50. 10,9	49. 28,43	28,70				14. 49. 49,40		G.	
	\odot 2 L.	1,3	15,4	29,4	43,4	58,0	11,8	14. 52. 26,1	51. 43,64	43,91				14. 52. 4,61		G.	
Nov. 8	(d) \odot 1 L.....	46,3	0,7	14,7	28,6	43,0	57,0	14. 54. 11,1	53. 28,78	29,05				14. 53. 50,47		G.	
	\odot 2 L.....	1,9	15,9	30,1	44,1	58,4	12,2	14. 56. 26,5	55. 44,16	44,43				14. 56. 5,85		G.	
Nov. 9	α Herculis.....	30,1	44,0	57,9	11,7	25,9	39,5	17. 7. 53,5	7. 11,81	12,01	22,15			17. 7. 34,21		G.	
	α Aquarii.....	46,9	0,3	13,6	27,1	40,9	54,1	21. 58. 7,7	57. 27,23	27,47	22,48			21. 57. 49,82		G.	
	(e) B. xxii. 425.....	29,5	43,5	57,4	....	....	....	22. 18.	19. 11,29	11,49				22. 19. 33,85		G.
	α Pegasi.....	59,2	13,1	27,0	41,1	55,1	8,9	22. 57. 22,9	56. 41,05	41,25	22,46			22. 57. 3,63		G.	
	Σ 3057.....	21,9	47,0	12,1	37,1	2,9	27,7	23. 57. 53,2	56. 37,42	37,36				23. 56. 59,77		G.	
	α Andromedæ	17,2	31,8	47,0	2,1	17,9	32,8	0. 0. 48,2	0. 2,44	2,57	22,18			0. 0. 24,98		G.	
	B. i. 576.....	15,7	29,2	42,5	56,2	9,7	23,4	1. 32. 37,1	31. 56,26	56,48				1. 32. 18,94		G.	
	α Arietis.....	22,2	37,0	51,4	6,1	21,0	35,2	1. 58. 50,1	58. 6,15	6,30	22,52			1. 58. 28,77		G.	
Nov. 10	(f) Venus 2 L.	45,0	....	....	25,3	39,3	....	12. 26.	26. 25,51	25,75		0,86	12. 26. 49,49		G.	
Nov. 13	B. i. 736.....	..	40,9	54,4	8,1	21,6	35,1	1. 40. 48,8	40. 8,04	8,26				1. 40. 34,19		G.	
	α Arietis.....	19,0	33,4	48,0	2,7	17,6	31,9	1. 58. 46,6	58. 2,75	2,90	25,93			1. 58. 28,84		G.	
	α Ceti.....	6,0	19,7	33,0	46,5	0,2	13,6	2. 54. 27,0	53. 46,57	46,80	26,03			2. 54. 12,77		G.	
	Aldebaran.....	55,5	9,5	23,6	37,7	51,9	5,8	4. 27. 20,0	26. 37,72	37,90	25,98			4. 27. 3,93		G.	
Nov. 15	Aldebaran.....	53,4	7,7	21,6	35,9	50,0	4,0	4. 27. 17,9	26. 35,79	36,02	27,89	1,02		4. 27. 3,89		G.	
	Rigel.....	58,1	11,8	25,2	39,0	52,8	6,1	5. 7. 19,9	6. 38,99	39,27	27,93			5. 7. 7,17		G.	
	β Tauri.....	18,0	33,2	48,4	3,9	19,2	34,4	5. 16. 50,0	16. 3,88	4,07	27,85			5. 16. 31,97		G.	
	(b) Venus 2 L.	28,8	42,3	55,7	9,1	23,0	36,4	12. 48. 50,0	48. 9,33	9,60		1,07	12. 48. 37,84		G.		
	Polaris SP.....	15,8	....	16,0	55,0	....	53,8	13. 29. 27,8	3. 52,19	57,32						G.
	Arcturus.....	23,1	37,5	51,9	6,1	20,8	34,9	14. 8. 49,2	8. 6,22	6,45	28,30					G.	
Nov. 20	\odot 1 L. ....	....	....	....	33,2	48,0	2,1	15. 43. 16,4	42. 33,38	33,77		1,01	15. 43. 6,58		G.	
	\odot 2 L.	8,5	23,1	37,1	51,6	6,1	20,2	15. 45. 34,9	44. 51,65	52,04			15. 45. 24,85		G.		
	α Ophiuchi.....	29,1	43,0	56,6	10,5	24,4	38,1	17. 27. 52,0	27. 10,53	10,83	32,93			17. 27. 43,71		G.	
	γ Aquilæ.....	38,8	52,4	6,1	19,8	33,8	47,2	19. 39. 1,0	38. 19,88	20,19	32,99			19. 38. 53,17		G.	
	(g) α Pegasi.....	48,5	2,8	16,3	30,1	44,2	58,1	22. 57. 12,0	56. 30,29	30,58	33,00			22. 57. 3,70		G.	
	α Andromedæ....	5,2	20,8	35,9	51,1	6,9	21,8	0. 0. 37,1	59. 51,26	51,49	33,15			0. 0. 24,65		G.	
	d Piscium.....	24,7	38,1	51,8	5,2	19,2	32,3	0. 12. 46,1	12. 5,34	5,67				0. 12. 38,84		G.	
	) 1 L.	27,1	41,0	54,9	8,9	23,1	36,8	0. 41. 50,7	41. 8,93	9,25				0. 41. 42,44		G.
	ϵ Piscium.....	41,3	55,1	8,5	22,1	36,0	49,3	0. 55. 3,0	54. 22,19	22,52				0. 54. 55,72		G.	
	* N.P.D. 99°. 50'.	....	....	24,5	38,1	52,1	5,5	0. 58. 19,3	57. 38,25	38,61				0. 58. 11,81		G.
	η Ceti.....	34,2	48,0	1,7	15,3	29,2	42,9	1. 0. 56,8	0. 15,44	15,80				1. 0. 49,00		G.	
	32 Ceti.....	....	....	39,8	53,5	7,2	20,8	1. 2. 34,4	1. 53,48	53,83				1. 2. 27,03		G.
	36 Ceti.....	46,7	0,4	13,9	27,6	41,3	54,6	1. 5. 8,3	4. 27,55	27,91				1. 5. 1,11		G.	
	(h) B. i. 186.....	34,0	47,7	1,2	14,8	28,4	41,9	1. 11. 55,6	11. 14,80	15,15				1. 11. 48,36		G.	
	B. i. 223.....	37,5	51,1	4,6	18,0	31,8	45,2	1. 13. 58,8	13. 18,15	18,50				1. 13. 51,71		G.	
	B. i. 276.....	34,0	47,4	0,8	14,4	28,1	41,3	1. 16. 55,0	16. 14,43	14,78				1. 16. 47,99		G.	
	Aldebaran.....	48,2	2,2	16,1	30,2	44,4	58,4	4. 27. 12,5	26. 30,29	30,58	33,41			4. 27. 3,93		G.	
	Venus 2 L.	26,8	40,4	53,9	7,4	21,1	34,5	13. 10. 48,2	10. 7,47	7,83		0,96	13. 10. 41,56		G.		
	Spica.....	46,5	0,2	13,9	27,5	41,5	54,9	13. 17. 8,6	16. 27,59	27,94	33,80			13. 17. 1,67		G.	
	Arcturus.....	17,9	32,1	46,4	0,8	15,1	29,5	14. 8. 43,9	8. 0,82	1,10	33,73			14. 8. 34,87		G.	
	ϵ Bootis.....	52,4	7,7	22,8	38,0	53,5	8,4	14. 38. 23,9	37. 38,10	38,33	33,75			14. 38. 12,11		G.	
Nov. 21	\odot 1 L.	0,9	15,2	29,7	44,1	58,8	13,0	15. 47. 27,4	46. 44,17	44,56				15. 47. 18,39		G.	
	\odot 2 L.	19,5	34,1	48,2	2,7	17,2	31,2	15. 49. 46,1	49. 2,72	3,11			15. 49. 36,94		G.		
	α Pegasi.....	47,2	1,4	15,3	29,0	43,1	57,0	22. 57. 10,8	56. 29,12	29,41	34,15			22. 57. 3,53		G.	
	(i) Σ 3057.....	....	....	0,2	25,1	51,1	15,7	23. 57. 41,1	56. 25,48	25,52				23. 56. 59,68		G.
	Σ 4.....	40,1	53,8	7,5	20,6	34,6	48,1	0. 2. 1,6	1. 20,91	21,23				0. 1. 55,39		G.	

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 1",01. From Nov. 4 = - 0",18. LEVEL Error = + 0",22.
From Nov. 4 = - 0",09. From Nov. 15 = + 0",77. AZIMUTH Error = + 6",00. From Nov. 4 = + 4",25. From Nov. 20 = + 5",56.

(a) 1 L. clouded, this faint. (b) Faint from clouds. (c) Much clouded. (d) Hazy. (e) Clouded.
This star precedes Σ 2905. (f) Cloudy. (g) The first four wires were taken by B. (h) Faint. (i) The observed
time has been diminished 1^m.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	h.	m.	s.	
Nov. 21	ϕ^3 Ceti.....	0,9	14,5	28,2	42,0	56,0	9,1	0.48.23,3			47.42,01	42,37		0,96	0.48.16,56			G.
	ϕ^4 Ceti.....	43,7	57,2	11,1	25,0	39,0	52,6	0.51.6,6			50.25,03	25,39			0.50.59,58			G.
	(a) ϵ Piscium.....	40,8	54,1	7,6	21,1	35,1	48,8	0.55.2,1			54.21,38	21,71			0.54.55,91			G.
	(b) Polaris M.....	46,8	29,3	14,0	54,3	34,6	23,0	1.6.5,8			3.55,40	48,83						G.
	(c) δ 1 L.....	57,0	11,1	25,0	39,2	53,9	7,6	1.30.21,6			29.39,35	39,65			1.30.13,87			G.
	(d) β Arietis.....	49,6	3,9	18,1	32,5	47,1	1,1	1.46.15,8			45.32,59	32,87			1.46.7,10			G.
	α Arietis.....	10,6	25,2	40,0	54,1	9,0	23,4	1.58.38,1			57.54,34	54,60	34,23		1.58.28,84			G.
	θ Arietis.....	15,7	29,8	44,0	58,1	12,8	26,8	2.9.41,1			8.58,33	58,62			2.9.32,86			G.
Nov. 23	(e) α Arietis.....	9,2	23,8	37,8	52,5	7,3	22,2	1.58.36,7			57.52,79	53,03	35,80	0,87				M
	π Arietis.....	23,2	36,8	50,7	4,8	19,5	32,5	2.40.47,2			40.4,96	5,24			2.40.41,05			M
	ϵ Arietis.....	4,3	18,5	33,2	47,5	2,1	16,5	2.50.31,0			49.47,59	47,85			2.50.23,66			M
	(f) δ 1 L.....	2,8	17,5	31,8	46,5	1,3	15,5	3.10.30,3			9.46,53	46,80			3.10.22,64			M
	η Tauri.....	59,2	13,7	28,3	43,2	57,8	12,2	3.38.27,1			37.43,08	43,32			3.38.19,18			M
Nov. 25	β Tauri.....	8,1	23,6	38,8	54,1	9,6	24,8	5.16.40,2			15.54,18	54,33	37,80	1,02				G.
	Venus 2 L.....	44,1	57,4	11,1	24,8	38,3	52,1	13.33.5,4			32.24,74	24,96		0,80	13.33.3,23			G.
	ϵ Bootis.....	48,1	3,4	18,4	33,7	40,1	4,1	14.38.19,3			37.33,74	33,89	38,26		14.38.12,20			G.
	α Coronæ Borealis.	42,9	57,9	13,0	28,1	43,4	58,3	15.28.13,6			27.28,17	28,33	38,26		15.28.6,67			G.
Nov. 26	\odot 1 L.....	6,1	20,8	35,0	49,6	4,1	18,5	16.8.33,0			7.49,59	49,82			16.8.28,18			G.
	\odot 2 L.....	25,9	40,1	54,6	9,1	23,8	38,2	16.10.52,7			10.9,20	9,43			16.10.47,79			G.
	Mercury 1 L.....	43,2	58,1	12,9	27,5	42,4	57,0	16.34.11,7			33.27,55	27,79			16.34.6,16			G.
	α Herculis.....				55,5	9,7	23,2	17.7.37,2			6.55,52	55,71	38,43		17.7.34,10			G.
	α Ophiuchi.....	23,8	37,4	51,1	5,0	19,1	32,6	17.27.46,5			27.5,07	5,27	38,48		17.27.43,67			G.
	(g) Rigel.....	47,7	1,1	14,7	28,1	42,0	55,4	5.7.9,1			6.28,30	28,52	38,86		5.7.7,31			G.
	β Tauri.....	7,6	22,7	37,9	53,1	8,7	24,0	5.16.39,2			15.53,32	53,47	38,68		5.16.32,27			G.
	ζ Tauri.....	3,1	17,3	31,7	46,1	0,9	15,0	5.28.29,7			27.46,26	46,43			5.28.25,23			G.
	α Orionis.....	29,1	42,7	56,1	9,6	23,3	37,0	5.46.50,7			46.9,79	10,00	38,82		5.46.48,81			G.
	δ 2 L.....	5,0	20,0	34,2	49,1	4,2	18,7	5.49.33,6			48.49,26	49,43			5.49.28,24			G.
	μ Geminorum.....	14,2	29,1	43,5	58,1	13,0	27,1	6.13.41,9			12.58,13	58,29			6.13.37,12			G.
	δ Ursæ Minoris SP.			25,8	16,2	2,7		6.32.36,3			21.15,03	16,99						G.
	γ Geminorum.....		40,2	54,1	8,2	22,6	36,2	6.28.50,2			28.8,23	8,42			6.28.47,26			G.
	Sirius.....	59,9	13,8	27,6	41,8	56,0	10,0	6.38.24,1			37.41,89	42,11	38,82		6.38.20,95			G.
	(h) Venus 2 L.....	14,2	27,4	41,1	55,1	8,6	22,1	13.37.36,0			36.54,93	55,15		0,84	13.37.34,04			G.
	ϵ Bootis.....	47,7	2,7	18,0	33,1	48,7	3,7	14.38.18,9			37.33,26	33,41	38,76		14.38.12,33			G.
Nov. 27	\odot 1 L.....	22,0	36,1	50,8	5,3	20,1	34,2	16.12.48,8			12.5,33	5,56			16.12.44,54			G.
	\odot 2 L.....	41,6	56,1	10,8	25,0	39,8	54,1	16.15.8,5			14.25,13	25,36			16.15.4,34			G.
	(a) Mercury 1 L.....	23,2	38,2	52,9	7,7	22,7	37,2	16.40.52,1			40.7,72	7,96			16.40.46,95			G.
	α Herculis.....			41,0	55,0	9,0	22,7	17.7.36,7			6.54,97	55,16	38,99		17.7.34,17			G.
	α Ophiuchi.....	23,2	37,1	50,8	4,5	18,6	32,1	17.27.46,1			27.4,63	4,83	38,92		17.27.43,85			G.
	(i) B.A.C. 549.....	38,0	51,9	5,9	19,9	34,2	48,1	1.40.2,1			39.20,02	20,21			1.39.59,52			G.
	α Arietis.....	5,9	20,2	34,8	49,2	4,1	18,5	1.58.33,1			57.49,40	49,56	39,27		1.58.28,88			G.
	(k) α Ceti.....	52,8	6,1	19,7	33,1	46,9	59,9	2.54.13,5			53.33,15	33,35	39,54		2.54.12,70			M
	η Tauri.....	55,9	10,2	25,1	39,9	54,9	9,1	3.38.23,9			37.39,86	40,03			3.38.19,41			M
	α Orionis.....	28,2	41,9	55,2	9,1	22,8	36,1	5.46.49,9			46.9,03	9,24	39,60		5.46.48,69			M
Dec. 3	(l) α Aquarii.....	25,5			6,2	19,3	33,2	21.57.46,3			57.6,01	6,37	43,27	0,58	21.57.49,73			M
	(l) ζ Pegasi.....	19,8	33,6	47,2	1,2	14,3	28,1	22.33.41,8			33.0,86	1,20			22.33.44,58			M
	(h) α Pegasi.....	38,2	52,1	5,3	19,5	33,9	47,3	22.57.			56.19,67	19,98	43,43		22.57.3,36			M
	ι Piscium.....	35,1	49,0	2,2	16,3	29,3	42,9	23.31.56,2			31.15,86	16,21			23.31.59,61			M
	(m) α Andromedæ.....	54,3	10,2	26,0	41,0		11,5	0.0.26,3			59.40,79	41,03	43,46		0.0.24,44			M
	(l) γ Pegasi.....	51,2	5,4	19,2	33,6	46,9	1,1	0.5.14,9			4.33,19	33,51			0.5.16,92			M
Dec. 4	(l) \odot 1 L.....				13,4	28,1		16.42.57,2			42.13,40	13,84		0,49	16.42.57,69			G.
	\odot 2 L.....	50,7	5,3	20,0		49,2		16.44.			44.34,52	34,96			16.45.18,81			G.
	H. C. 7074.....			43,2	57,5	12,4	27,2	3.41.41,3			40.57,64	57,92			3.41.42,00			M
	γ Eridani.....	23,6	37,8	51,7	5,2	19,5	33,3	3.50.47,2			50.5,47	5,88			3.50.49,96			M
	(n) Aldebaran.....	37,6	51,7	5,5	19,7	34,0	47,8	4.27.1,7			26.19,72	20,03	44,13		4.27.4,12			G.
	α Leporis.....	28,8	42,9	56,9	11,2	25,5	39,9	5.25.54,0			25.11,32	11,74			5.25.55,85			M

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = -0",18. LEVEL Error = +0",77. From Nov. 23 = +0",55. AZIMUTH Error = +5",56. From Nov. 25 = +3",37. From Dec. 3 = +6",29.

(a) Unsteady. (b) Flashing. (c) Through a thick fog. (d) Indefinite. (e) The observations of this day are the first by Mr Morgan. (f) Great motion. (g) Considerable fall of Temperature on this night. (h) Faint. (i) 'This star follows 4 Arietis 10', and is less bright by 1½ Mag.' (k) No account is taken on this and following days of difference of personal equation of G and M, which appears not to be constant. (l) Cloudy. (m) Indistinct from clouds. (n) Large disk.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Dec. 4	ε Orionis.....	....	....	25,2	38,6	52,6	5,8	5.28.19,2			27.38,81	39,18			0,49	5.28.23,29	M
	α Orionis.....	23,5	37,2	51,1	4,1	18,1	31,4	5.46.45,3			46.4,39	4,74	44,22			5.46.48,86	G.		
	μ Geminorum....	9,1	23,5	37,8	52,9	7,9	22,1	6.13.36,9			12.52,89	53,16				6.13.37,29	M		
	(a) Sirius.....	54,5	8,8	22,6	36,4	51,0	4,8	6.38.18,8			37.36,70	37,11	43,99			6.38.21,24	M		
	δ 2 L.....	40,0	53,8	7,9	21,7	36,1	49,9	12.35.4,0			34.21,92	22,31		0,33		12.35.6,54	G.		
	Polaris SP. M. ...	9,4	56,6	37,8	25,0	7,8	50,2	13.5.30,8			3.22,51	31,31				1.4.15,55	G.		
	Spica.....	36,3	50,0	3,8	17,2	31,2	44,8	13.16.58,4			16.17,39	17,79	44,31			13.17.2,03	G.		
	Arcturus.....	7,5	22,0	36,1	50,5	5,0	19,1	14.8.33,6			7.50,55	50,84	44,28			14.8.35,09	G.		
	(b) Venus 2 L.....	48,1	1,8	15,4	29,2	43,2	56,9	14.14.10,4			13.29,29	29,69				14.14.13,94	G.		
	ε Bootis.....	42,1	57,2	12,7	28,0	43,1	58,1	14.38.13,4			37.27,80	28,04	44,30			14.38.12,30	G.		
Dec. 5	⊙ 1 L.....	50,7	5,2	19,9	34,4	49,1	3,8	16.47.18,2			46.34,48	34,92				16.47.19,21	G.		
	⊙ 2 L.....	11,9	26,4	41,0	55,5	10,3	25,0	16.49.39,5			48.55,66	56,10				16.49.40,39	G.		
	ζ Cygni.....	....	5,2	20,5	35,9	51,5	7,1	21.6.22,3			5.36,01	36,24				21.6.20,59	M	
	β Aquarii.....	58,6	12,2	25,8	40,0	53,2	6,5	21.23.19,9			22.39,46	39,84	44,07			21.23.24,19	M		
	α Aquarii.....	24,6	37,8	51,4	4,8	18,4	31,7	21.57.45,2			57.4,84	5,20	44,41			21.57.49,56	M		
	α Pegasi.....	37,0	50,8	4,7	18,8	33,2	46,8	22.57.0,5			56.18,83	19,14	44,24			22.57.3,51	M		
	α Andromedæ....	54,1	9,2	24,7	39,9	55,2	10,5	0.0.25,8			59.39,92	40,16	44,30			0.0.24,55	M		
	γ Pegasi.....	50,5	4,6	18,4	32,2	46,3	0,2	0.5.14,1			4.32,34	32,66				0.5.17,05	M		
	β Ceti.....	22,2	36,1	50,3	4,5	19,2	33,2	0.35.47,1			35.4,65	5,08	44,41			0.35.49,48	M		
	Polaris M.....	30,0	11,0	53,8	39,6	24,4	4,8	1.5.48,6			3.38,89	30,79				1.4.15,19	G.		
	θ Ceti.....	52,3	6,2	19,5	33,2	47,3	0,8	1.16.14,2			15.33,37	33,76				1.16.18,17	M		
	B.A.C. 549.....	32,3	46,6	0,5	14,5	29,0	42,5	1.39.56,7			39.14,59	14,90				1.39.59,31	G.		
	Aldebaran.....	37,2	51,1	5,1	19,2	33,4	47,2	4.27.1,2			26.19,20	19,51	44,66			4.27.3,96	G.		
	Rigel.....	41,4	55,2	8,9	22,8	36,5	49,9	5.7.3,6			6.22,62	23,01	44,49			5.7.7,47	M		
	β Tauri.....	1,4	16,8	32,6	47,5	2,9	18,1	5.16.33,9			15.47,60	47,84	44,46			5.16.32,30	M		
	α Leporis.....	28,5	42,6	56,9	11,2	25,1	39,2	5.25.53,3			25.10,98	11,40				5.25.55,80	M		
	δ 2 L.....	17,0	31,1	45,4	0,0	14,2	28,4	13.31.42,7			30.59,83	0,24		0,32		13.31.44,78	G.		
	(c) Arcturus.....	....	....	....	50,3	5,0	19,2	14.8.33,5			7.50,49	50,78	44,37			14.8.35,33	G.
	(d) Venus 2 L.....	27,1	41,0	54,7	8,2	22,1	35,1	14.18.49,0			18.8,17	8,58				14.18.53,13	G.		
	(e) α Serpentis.....	....	25,1	39,0	52,4	6,1	19,7	15.36.33,4			35.52,50	52,85	44,81			15.36.37,42	G.	
Dec. 6	⊙ 1 L.....	12,7	27,1	41,9	56,3	11,2	25,8	16.51.40,4			50.56,49	56,93				16.51.41,52	G.		
	⊙ 2 L.....	34,0	48,4	3,1	17,9	32,7	47,1	16.54.1,8			53.17,86	18,30				16.54.2,89	G.		
	α Ophiuchi.....	17,5	31,3	45,1	58,9	13,0	26,4	17.27.40,3			26.58,93	59,26	44,53			17.27.43,85	G.		
	ζ Cygni.....	49,2	4,7	20,1	36,0	51,3	6,9	21.6.22,3			5.35,79	36,02				21.6.20,66	M		
	β Aquarii.....	58,2	11,9	25,4	39,2	52,1	16,0	21.23.19,8			22.38,95	39,33	44,57			21.23.23,98	M		
	(e) H. C. 47310.....	30,1	46,8	3,0	20,4	37,2	53,9	0.0.10,8			59.20,32	20,52				0.0.5,20	G.		
	34 Piscium.....	....	53,1	7,0	20,4	34,4	48,0	0.2.1,7			1.20,59	20,93				0.2.5,61	G.	
	B.A.C. 549.....	....	....	....	....	28,7	42,6	1.39.56,5			39.14,53	14,84				1.39.59,54	G.
	(f) B. r. 988.....	36,2	49,7	3,1	17,1	30,4	44,9	1.54.58,3			54.17,10	17,43				1.55.2,14	G.		
	α Arietis.....	0,2	14,5	29,2	43,7	58,4	13,0	1.58.27,6			57.43,81	44,08	44,71			1.58.28,79	G.		
	H. C. 4925.....	9,1	23,0	37,1	51,1	5,1	19,1	2.31.32,9			30.51,06	51,37				2.31.36,08	G.		
	α Ceti.....	47,3	0,9	14,2	27,8	41,4	54,8	2.54.8,2			53.27,80	28,14	44,76			2.54.12,86	M		
	ζ Eridani.....	55,1	8,2	21,5	35,3	49,1	2,8	3.8.16,4			7.35,49	35,88				3.8.20,60	M		
Dec. 7	α Andromedæ....	53,3	8,8	24,1	39,3	54,5	9,8	0.0.25,2			59.39,29	39,53	44,91	0,36		0.0.24,58	M		
	(g) γ Pegasi.....	50,1	3,5	17,2	31,5	45,5	59,4	0.5.13,2			4.31,49	31,81				0.5.16,86	M		
	(h) B.A.C. 797.....	38,0	52,2	7,3	21,8	36,9	51,4	2.28.6,2			27.21,98	22,25				2.28.7,34	M		
	δ Ceti.....	....	22,2	35,5	49,2	2,4	16,1	2.31.29,3			30.49,05	49,41				2.31.34,50	M	
	γ Ceti.....	52,4	5,9	19,2	32,8	46,4	59,9	2.35.13,2			34.32,84	33,19				2.35.18,28	M		
	α Ceti.....	47,0	0,3	13,9	27,2	41,0	54,2	2.54.7,9			53.27,36	27,70	45,20			2.54.12,79	G.		
	B. r. 805.....	....	2,8	16,2	29,9	44,1	57,1	3.41.10,9			40.30,04	30,42				3.41.15,53	M	
	γ Eridani.....	22,9	36,8	50,6	4,4	18,3	32,2	3.50.46,1			50.4,47	4,88				3.50.49,99	M		
	ω ² Tauri.....	45,2	59,4	13,9	28,1	42,9	56,9	4.8.11,1			7.28,22	28,51				4.8.13,62	M		
	2 Camelopardi....	54,0	16,1	39,0	1,1	23,2	46,1	4.28.8,2			27.1,11	1,18				4.27.46,30	M		
	α Aurigæ.....	23,6	....	55,2	11,8	27,9	44,0	4.46.59,9			46.11,72	11,93				4.46.57,05	M	
	Rigel.....	41,1	54,7	8,1	22,0	35,9	49,2	5.7.2,9			6.21,99	22,38	45,14			5.7.7,51	G.		
	(i) β Tauri.....	....	....	31,3	47,0	2,4	17,7	5.16.33,0			15.46,96	47,20	45,13			5.16.32,33	G.
Dec. 19	(k) α Andromedæ ...	52,1	7,3	22,6	37,8	53,3	8,2	0.0.23,7			59.37,86	38,13	46,14	0,34		0.0.24,32	C.		

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = - 0",18. LEVEL Error = + 0",55. From Dec. 19 = + 0",94.
 AZIMUTH Error = + 6",29. From Dec. 19 = + 6",51.

(a) Field badly illumined. (b) Bad definition. (c) Discordant clock errors by these observations. (d) Counting 1st in defect: the observation has been corrected accordingly. (e) Faint. (f) 'Seemed of Mag. 8,9.' (g) Unsteady.
 (h) The following star. (i) The last observation by G. previous to his leaving the Observatory. (k) Before this a long continuance of cloudy weather.

Month and Day.	NAME OF STAR or PLANET.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Dec. 19	Polaris.....	54,3	25,0	53,6	25,0	3,8	29,5	1. 20.	3. 24,51	16,87		0,34	1. 4. 3,07	C.
	(a) π Piscium.....	....	40,6	54,4	8,2	22,1	35,6	1. 28.	28. 8,20	8,56			1. 28. 54,77	C.
	β Arietis.....	37,3	51,8	6,1	20,4	34,9	49,2	1. 46. 3,3	45. 20,43	20,76			1. 46. 6,97	C.
	α Arietis.....	58,5	13,0	27,6	42,1	57,0	11,3	1. 58. 25,9	57. 42,21	42,51	46,19		1. 58. 28,73	C.
	δ 1 L.....	6,3	20,4	34,7	48,8	3,4	17,4	2. 3. 31,7	2. 48,96	49,30			2. 3. 35,52	C.
	27 Arietis.....	52,1	6,3	20,2	34,4	48,7	2,5	2. 22. 16,7	21. 34,41	34,75			2. 22. 20,97	C.
	π Arietis.....	12,2	26,4	40,6	54,5	8,7	22,6	2. 40. 36,8	39. 54,54	54,88			2. 40. 41,11	C.
	α Ceti.....	45,7	59,2	12,5	26,1	39,9	53,2	2. 54. 6,6	53. 26,17	26,55	46,31		2. 54. 12,78	C.
Dec. 20.	\odot 1 L.	0,7	15,5	30,0	44,8	59,6	14,2	17. 53. 28,8	52. 44,80	45,27		0,38	17. 53. 31,70	C.
	\odot 2 L.	23,2	37,9	52,5	7,0	22,3	36,6	17. 55. 51,3	55. 7,26	8,73			17. 55. 54,16	C.
	Mercury 1 L.....	16,5	31,2	46,1	0,8	16,0	30,6	19. 14. 45,4	14. 0,95	1,42			19. 14. 47,87	C.
	α Andromedæ	51,7	7,0	22,1	37,4	53,0	8,1	0. 0. 23,2	59. 37,50	37,77	46,48		0. 0. 24,30	C.
	(b) ϵ Piscium.....	57,1	10,5	24,0	37,4	51,2	4,7	1. 0. 18,1	59. 37,57	37,94			1. 0. 24,49	C.
	(c) θ Ceti.....	50,0	3,5	17,1	30,7	44,4	58,0	1. 16. 11,4	15. 30,74	31,15			1. 16. 17,70	C.
	105 Piscium.....	52,2	6,3	20,3	34,1	48,2	2,0	1. 31. 16,0	30. 34,16	34,50			1. 31. 21,05	C.
	B.A.C. 632.....	45,6	59,7	14,0	27,9	42,1	56,2	1. 55. 10,3	54. 27,97	28,30			1. 55. 14,86	C.
	α Arietis.....	58,2	12,6	27,1	41,8	56,5	11,0	1. 58. 25,6	57. 41,84	42,14	46,55		1. 58. 28,70	C.
	27 Arietis.....	52,0	6,1	20,0	34,0	48,2	2,2	2. 22. 16,3	21. 34,11	34,45			2. 22. 21,02	C.
	π Arietis.....	12,1	26,1	40,0	54,2	8,4	22,2	2. 40. 36,3	39. 54,19	54,53			2. 40. 41,10	C.
	(d) δ 1 L.....	9,2	23,5	38,4	52,6	7,3	21,8	2. 53. 36,2	52. 52,72	53,05			2. 53. 39,63	C.
	ζ Arietis.....	32,3	46,6	1,1	15,3	30,0	44,1	3. 5. 58,5	5. 15,42	15,75			3. 6. 2,33	C.
	g Arietis.....	41,1	55,8	10,6	25,2	40,4	55,1	3. 15. 9,7	14. 25,42	25,72			3. 15. 12,30	C.
	19 Tauri.....	30,8	45,5	0,2	15,0	29,9	44,5	3. 35. 59,2	35. 15,01	15,31			3. 36. 1,90	C.
	Aldebaran.....	35,3	49,2	3,2	17,1	31,4	45,3	4. 26. 59,3	26. 17,26	17,60	46,66		4. 27. 4,20	C.
	Polaris SP.....	....	....	17,1	7,8	36,0	4,8	13. 28. 37,1	3. 7,88	15,27		0,42	1. 4. 2,03	B.
Dec. 21	α Arietis.....	57,7	12,2	26,6	41,4	56,1	10,3	1. 58. 25,2	57. 41,36	41,66	47,02			C.
	(e) ζ Arietis.....	....	....	0,3	15,0	29,4	43,6	3. 5. 58,2	5. 14,93	15,26			3. 6. 2,26	C.
	g Arietis.....	40,8	55,4	10,1	25,0	40,1	54,3	3. 15. 9,2	14. 24,99	25,29			3. 15. 12,30	C.
	δ 1 L.....	21,7	36,4	50,8	5,7	20,7	35,2	3. 44. 49,8	44. 5,76	6,09			3. 44. 53,10	C.
	(a) ω^2 Tauri.....	....	57,5	....	26,1	....	54,7	4. 8. 9,2	7. 26,13	26,46			4. 8. 13,48	C.
	ϵ Tauri.....	6,6	21,1	....	49,1	3,6	17,7	4. 19.	18. 49,31	49,64			4. 19. 36,67	C.
Dec. 28	Aldebaran.....	35,0	49,0	2,8	16,7	31,0	45,1	4. 26. 59,0	26. 16,94	17,28	46,99			C.
	(f) \odot 1 L.	29,4	44,1	58,8	13,4	28,4	42,8	18. 28. 57,7	28. 13,52					C.
	\odot 2 L.....	51,5	6,2	21,1	35,6	50,5	5,0	18. 31. 19,7	30. 35,67					C.

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = - 0'',18. LEVEL Error = + 0'',94. AZIMUTH Error = + 6'',51.

(a) Cloudy. (b) The counting was 1^s short: all the wires except the first have been increased 1^s. (c) Hurried at Wire I. (d) Wire II. was written down confusedly 24,5. (e) Taken hurriedly: star also clouded. (f) As no clock-star could be obtained near this observation, it is retained only for time of transit of the Sun's diameter.

MEAN RIGHT ASCENSIONS OF THE STARS

OBSERVED IN THE YEAR 1844,

AS DEDUCED FROM EACH DAY'S OBSERVATION;

WITH

A CATALOGUE

OF THE

CONCLUDED MEAN RIGHT ASCENSIONS,

JANUARY 1, 1844.

Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
H. C. 47310.			Σ 25.			* N.P.D. 103°. 5'.			POLARIS.		
Sept. 28	-4,93	0. 0. 0,66	Sept. 24	-4,59	0. 10. 39,42	Sept. 26	-4,39	0. 49. 47,06	Mar. 28	+33,57	1. 3. 18,92
Dec. 6	-4,40	0,80				Oct. 3	-4,44	47,31	29	+33,64	18,87
α ANDROMEDÆ.			δ Piscium.			φ ⁴ Ceti.			April 1	+34,01	21,25
Jan. 1	-0,89	0. 0. 20,22	Aug. 29	-4,22	0. 12. 34,58	Sept. 24	-4,37	0. 50. 55,13	1	+34,04	21,23
15	-0,70	20,13	Sept. 25	-4,51	34,58	25	-4,39	55,25	2	+34,08	21,29
22	-0,61	20,10	26	-4,52	34,38	Oct. 10	-4,57	54,98	9	+33,12	18,17
Feb. 13	-0,39	20,13	Nov. 20	-4,40	34,44	Nov. 21	-4,38	55,20	10	+33,09	18,14
20	-0,34	20,13	12 Ceti.			B. o. 962.			16	+32,17	17,54
28	-0,31	20,07	Sept. 21	-4,42	0. 22. 4,76	Sept. 21	-4,34	0. 54. 28,36	17	+32,02	17,55
Mar. 1	-0,30	20,11	24	-4,44	4,67	25	-4,38	28,33	18	+31,69	16,05
2	-0,30	20,15	β Ceti.			Oct. 3	-4,44	28,37	22	+30,08	18,11
31	-0,43	20,07	Sept. 21	-4,37	0. 35. 45,40	10	-4,48	28,29	22	+30,08	16,86
Apr. 1	-0,45	20,04	27	-4,42	45,34	ε Piscium.			23	+29,91	16,54
2	-0,45	20,06	30	-4,44	45,29	Jan. 26	-0,90	0. 54. 51,18	23	+29,91	18,48
3	-0,48	19,98	Oct. 3	-4,45	45,44	Sept. 26	-4,54	50,95	23	+29,76	19,72
5	-0,50	20,09	Dec. 5	-4,16	45,32	27	-4,54	51,21	28	+28,31	15,31
9	-0,56	20,09	* N.P.D. 78°. 19'.			Nov. 20	-4,60	51,12	29	+28,12	15,97
22	-0,80	20,07	Sept. 24	-4,58	0. 38. 47,84	21	-4,60	51,31	29	+27,93	16,54
24	-0,85	20,02	27	-4,60	47,66	* N.P.D. 99°. 30'.			May 6	+24,52	17,30
26	-0,89	20,03	58 Piscium.			Sept. 25	-4,38	0. 58. 7,41	6	+24,29	17,29
29	-0,96	20,06	Jan. 22	-0,86	0. 38. 53,68	26	-4,39	7,40	10	+22,78	18,13
30	-0,98	20,05	24	-0,84	53,52	Oct. 3	-4,45	7,45	10	+22,56	17,86
May 10	-1,24	20,14	δ Piscium.			10	-4,49	7,47	10	+22,56	18,49
Aug. 28	-4,47	20,00	Sept. 26	-4,54	0. 40. 35,40	Nov. 20	-4,44	7,37	17	+18,52	16,95
Sept. 18	-4,71	(20,45)	27	-4,54	35,61	28 Ceti.			17	+18,17	17,84
20	-4,72	20,10	i Piscium.			Sept. 20	-4,33	0. 58. 15,65	18	+17,82	19,05
24	-4,74	20,17	Jan. 22	-0,89	0. 41. 31,12	24	-4,37	15,56	June 13	-1,47	17,08
25	-4,75	20,11	24	-0,87	31,04	31 Cassiopeiæ.			14	-1,92	17,08
26	-4,75	20,10	Sept. 24	-4,82	31,26	Jan. 22	-1,00	1. 0. 10,81	Aug. 29	-59,27	16,95
27	-4,76	20,19	Piazzii O. 208.			26	-0,81	10,89	29	-59,53	15,46
Oct. 2	-4,77	20,16	Jan. 22	-0,89	0. 43. 25,22	30	-0,63	10,82	30	-59,79	14,02
3	-4,77	20,11	Sept. 20	-4,54	25,26	e Piscium.			Sept. 18	-68,73	18,68
10	-4,77	20,28	21	-4,55	25,30	Dec. 20	-4,35	1. 0. 20,14	20	-69,25	18,82
11	-4,77	20,07	20 Ceti.			η Ceti.			26	-70,51	17,76
26	-4,72	20,20	Sept. 26	-4,48	0. 45. 2,12	Oct. 3	-4,44	1. 0. 44,66	26	-70,63	18,53
28	-4,71	20,19	Oct. 10	-4,54	2,22	10	-4,48	44,58	27	-70,75	19,47
Nov. 9	-4,62	20,36	φ ³ Ceti.			Nov. 20	-4,43	44,57	Oct. 7	-72,77	20,70
20	-4,51	20,14	Sept. 24	-4,39	0. 48. 12,09	32 Ceti.			7	-72,78	21,38
Dec. 3	-4,36	20,08	Oct. 10	-4,49	12,10	Sept. 25	-4,38	1. 2. 22,70	Dec. 4	-57,66	17,89
5	-4,33	20,22	Nov. 21	-4,38	12,18	26	-4,40	22,54	5	-57,37	17,82
7	-4,31	20,27				Nov. 20	-4,44	22,59	19	-48,22	14,85
19	-4,14	20,18							20	-47,28	14,74
20	-4,12	20,18							B. I. 51.		
Σ 1.									Oct. 3	-4,45	1. 3. 51,06
Oct. 4	-4,95	0. 0. 49,04							10	-4,50	51,08
Σ 4.									36 Ceti.		
Nov. 21	-4,31	0. 1. 51,08							Nov. 20	-4,48	1. 4. 56,63
34 Piscium.									37 Ceti.		
Sept. 28	-4,54	0. 2. 1,48							Oct. 3	-4,44	1. 6. 32,67
Dec. 6	-4,17	1,44							10	-4,49	32,73
γ Pegasi.									B. I. 186.		
Dec. 3	-4,25	0. 5. 12,67							Oct. 10	-4,51	1. 11. 43,96
5	-4,23	12,82							Nov. 20	-4,52	43,84
7	-4,21	12,65							B. I. 223.		
									Nov. 20	-4,55	1. 13. 47,16

Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
B. I. 228.			γ Andromedæ.			Σ 274.			α Ceti.		
Oct. 10	-4,52	1.14.14,11	Jan. 20	-1,60	1.54.20,92	Jan. 22	-1,43	2.23.29,27	Jan. 1	-1,86	2.54.7,81
θ Ceti.			10 Arietis.			29 Arietis.			15	-1,72	7,95
Oct. 3	-4,42	1.16.13,64	Jan. 22	-1,43	1.54.49,01	Jan. 20	-1,57	2.24.22,06	20	-1,66	7,93
Dec. 5	-4,40	13,77	26	-1,37	48,88	26	-1,49	22,09	22	-1,64	7,89
20	-4,26	13,44	Feb. 5	-1,22	48,87	Feb. 1	-1,41	22,14	26	-1,58	7,82
B. I. 276.			B. I. 988.			B.A.C. 797.			Feb. 1	-1,50	7,93
Nov. 20	-4,59	1.16.43,40	Dec. 6	-4,91	1.54.57,23	Dec. 7	-5,46	2.28.1,88	13	-1,32	7,72
η Piscium.			B.A.C. 632.			ν Arietis.			24	-1,16	7,91
Jan. 22	-1,16	1.23.8,88	Jan. 27	-1,31	1.55.9,82	Sept. 28	-4,79	2.29.58,18	Oct. 17	-4,65	7,77
26	-1,09	8,74	Oct. 31	-5,07	10,01	δ Ceti.			31	-4,82	7,81
B. I. 497.			Dec. 20	-4,96	9,90	Dec. 7	-4,83	2.31.29,67	Nov. 13	-4,93	7,84
Oct. 27	-4,71	1.28.22,39	α ARIETIS.			H. C. 4925.			27	-4,99	7,71
π Piscium.			Jan. 15	-1,54	1.58.23,58	Jan. 22	-1,61	2.31.30,89	Dec. 6	-5,00	7,86
Sept. 28	-4,62	1.28.50,17	26	-1,38	23,50	Feb. 1	-1,47	30,95	7	-5,00	7,79
Dec. 19	-4,67	50,10	Feb. 20	-1,02	23,52	5	-1,41	30,76	19	-4,96	7,82
105 Piscium.			Mar. 13	-0,76	23,53	Oct. 31	-5,12	30,88	δ Arietis.		
Jan. 22	-1,22	1.31.16,51	30	-0,66	23,51	Dec. 6	-5,24	30,84	Jan. 1	-2,07	3.2.43,19
26	-1,16	16,50	Apr. 1	-0,66	23,38	μ Arietis.			ζ Arietis.		
Dec. 20	-4,74	16,31	Sept. 28	-4,86	23,54	Jan. 20	-1,68	2.33.34,95	Dec. 20	-5,53	3.5.56,80
B. I. 568.			Oct. 3	-4,93	23,57	22	-1,65	34,96	21	-5,52	56,74
Oct. 31	-4,75	1.32.1,29	7	-4,99	23,55	γ Ceti.			ζ Eridani.		
B. I. 576.			31	-5,22	23,58	Jan. 21	-1,53	2.35.13,34	Dec. 6	-4,74	3.8.15,86
Nov. 9	-4,79	1.32.14,15	Nov. 9	-5,26	23,51	Dec. 7	-4,90	13,38	g Arietis.		
B.A.C. 549.			13	-5,27	23,57	B.A.C. 845.			Jan. 1	-2,20	3.15.6,49
Nov. 27	-4,99	1.39.54,53	21	-5,27	23,57	Jan. 20	-1,60	2.36.31,11	Dec. 20	-5,72	6,58
Dec. 5	-4,95	54,36	27	-5,27	23,61	22	-1,57	31,04	21	-5,72	6,58
6	-4,94	54,60	Dec. 6	-5,23	23,56	26	-1,52	31,07	19 Tauri.		
B. I. 736.			19	-5,14	23,59	π Arietis.			Dec. 20	-5,83	3.35.56,07
Nov. 13	-4,83	1.40.29,36	20	-5,13	23,57	Sept. 28	-4,64	2.40.35,88	η Tauri.		
β Arietis.			θ Arietis.			Nov. 23	-5,29	35,76	Jan. 21	-2,13	3.38.13,31
Jan. 27	-1,26	1.46.2,09	Jan. 26	-1,43	2.9.27,62	Dec. 19	-5,26	35,85	July 10	-2,24	13,35
Sept. 28	-4,79	2,05	Nov. 21	-5,22	27,64	20	-5,25	35,85	Nov. 23	-5,72	13,46
Nov. 21	-5,12	1,98	27 Arietis.			ϵ Arietis.			27	-5,76	13,65
Dec. 19	-4,97	2,00	Jan. 26	-1,49	2.22.15,84	Nov. 23	-5,46	2.50.18,20	B. III. 805.		
			Feb. 1	-1,41	15,91	H. C. 7074.			Dec. 7	-4,99	3.41.10,54
			5	-1,35	15,91	Dec. 4	-5,81	3.41.36,19	γ Eridani.		
			Oct. 31	-5,12	15,90				Dec. 4	-4,71	3.50.45,25
			Dec. 19	-5,15	15,82				7	-4,72	45,27
			20	-5,14	15,88						

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	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
A ¹ Tauri.			RIGEL <i>continued.</i>			B. v. 356.			B. v. 623.		
Jan. 1	-2,36	3.55.28,81	Feb. 13	-1,92	5.7.2,68	Feb. 1	-2,27	5.15.13,25	Feb. 16	-2,14	5.24.54,17
			16	-1,87	2,57	8	-2,19	13,34	20	-2,08	54,04
ω ² Tauri.			22	-1,78	2,65	Mar. 5	-1,78	13,35	Mar. 1	-1,91	54,12
Jan. 1	-2,38	4.8.7,70	Mar. 1	-1,65	2,55	6	-1,76	13,39	5	-1,85	54,25
Dec. 7	-5,77	7,85	5	-1,57	2,66	* N.P.D. 85°. 30'.			α Leporis.		
21	-5,82	7,66	6	-1,55	2,67	Jan. 26	-2,31	5.15.21,40	Dec. 4	-4,62	5.25.51,23
ε Tauri.			9	-1,50	2,57	Feb. 3	-2,24	21,44	5	-4,64	51,22
Dec. 21	-5,81	4.19.30,86	30	-1,13	2,65	13	-2,11	21,40	* N.P.D. 83°. 33'.		
ALDEBARAN.			Apr. 9	-0,98	2,62	16	-2,07	21,41	Mar. 1	-1,93	5.26.22,90
Jan. 1	-2,40	4.26.58,58	22	-0,81	2,51	20	-2,01	21,36	5	-1,86	23,01
10	-2,37	58,60	24	-0,79	2,62	Mar. 1	-1,84	21,25	9	-1,79	22,88
15	-2,34	58,57	25	-0,78	2,67	β TAURI.			* N.P.D. 83°. 21'.		
19	-2,31	58,61	26	-0,78	2,69	Jan. 22	-2,74	5.16.26,09	Feb. 13	-2,20	5.27.0,43
20	-2,30	58,62	30	-0,74	2,69	31	-2,67	26,02	16	-2,15	0,40
22	-2,28	58,61	May 1	-0,74	2,65	Feb. 24	-2,31	26,08	20	-2,10	0,36
26	-2,23	58,68	2	-0,73	2,60	27	-2,26	26,17	ε Orionis.		
31	-2,18	58,54	25	-0,71	2,58	Mar. 29	-1,66	26,05	Dec. 4	-5,06	5.28.18,23
Feb. 20	-1,89	58,61	31	-0,74	2,55	30	-1,63	26,05	ζ Tauri.		
Mar. 5	-1,64	58,66	June 10	-0,83	2,63	Apr. 3	-1,57	26,09	Jan. 31	-2,56	5.28.19,41
Apr. 3	-1,18	58,62	Aug. 6	-1,98	2,67	9	-1,48	26,16	Sept. 5	-3,42	19,39
4	-1,17	58,55	Nov. 15	-4,59	2,58	23	-1,30	26,08	Nov. 26	-5,69	19,54
8	-1,12	58,70	Dec. 5	-4,89	2,58	24	-1,29	26,05	125 Tauri.		
9	-1,11	58,58	7	-4,91	2,60	25	-1,28	26,06	Jan. 20	-2,74	5.30.4,18
23	-1,00	58,56	B. v. 294.			26	-1,28	26,09	Feb. 8	-2,57	4,23
24	-1,00	58,60	Jan. 26	-2,30	5.12.48,17	29	-1,25	26,06	B. v. 802.		
26	-0,99	58,44	Feb. 3	-2,22	48,20	May 2	-1,23	26,02	Feb. 16	-2,18	5.31.18,43
27	-0,99	58,62	13	-2,10	48,25	13	-1,20	26,04	20	-2,13	18,43
29	-0,98	58,57	16	-2,05	48,15	July 21	-2,26	26,00	22	-2,09	18,47
May 1	-0,97	58,54	20	-1,99	48,17	Aug. 6	-2,73	26,03	Mar. 1	-1,96	18,59
2	-0,97	58,52	Mar. 1	-1,83	48,16	Nov. 15	-5,82	26,15	5	-1,90	18,42
June 12	-1,32	58,45	B. v. 303.			26	-6,05	26,22	* N.P.D. 82°. 26'.		
Aug. 6	-2,72	58,58	Jan. 31	-2,25	5.13.5,98	Dec. 5	-6,20	26,10	Feb. 20	-2,15	5.34.31,67
Nov. 13	-5,34	58,59	Feb. 17	-2,03	5,78	7	-6,23	26,10	22	-2,12	31,54
15	-5,37	58,52	Mar. 5	-1,75	5,95	B. v. 399.			B. v. 925.		
20	-5,45	58,48	6	-1,74	6,09	Jan. 1	-2,38	5.17.0,29	Feb. 24	-2,09	5.35.35,97
Dec. 4	-5,62	58,50	9	-1,68	5,98	Mar. 1	-1,85	0,31	Mar. 1	-1,99	35,95
5	-5,63	58,33	B. v. 324.			5	-1,78	0,47	5	-1,92	35,94
20	-5,72	58,48	Feb. 1	-2,26	5.13.52,43	* N.P.D. 85°. 22'.					
2 Camelopardi.			8	-2,18	52,42	Jan. 26	-2,33	5.18.25,46			
Dec. 7	-8,20	4.27.38,10	Mar. 5	-1,77	52,30	Feb. 1	-2,27	25,40			
ι Aurigæ.			B.A.C. 1661.			3	-2,25	25,49			
Dec. 7	-6,46	4.46.50,59	Jan. 1	-2,37	5.13.53,56	8	-2,20	25,42			
RIGEL.			19	-2,34	53,57	13	-2,13	25,45			
Jan. 1	-2,26	5.7.2,51	20	-2,34	53,62	16	-2,09	25,44			
10	-2,25	2,59	Feb. 22	-1,95	53,62	Α Orionis.					
19	-2,20	2,70	m Orionis.			Jan. 1	-2,41	5.22.26,36			
20	-2,20	2,57	Jan. 19	-2,34	5.14.38,30	10	-2,43	26,43			
26	-2,14	2,59	20	-2,33	38,25	19	-2,40	26,47			
Feb. 3	-2,06	2,61	Feb. 22	-1,95	38,40	20	-2,49	26,35			
8	-2,00	2,60				22	-2,38	26,43			
10	-1,97	2,71				26	-2,35	26,41			

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	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
B Tauri.			γ Geminorum.			k Geminorum.			POLLUX continued.		
Sept. 5	-3,45	5.39.26,63	Mar. 26	-1,96	6.28.42,00	Feb. 2	-2,83	7.24.41,89	Mar. 9	-2,78	7.35.45,76
			Sept. 5	-2,96	41,97	Mar. 28	-2,22	42,24	12	-2,73	45,76
			Nov. 26	-5,34	41,92				21	-2,58	45,74
B. v. 1015.			ϵ Geminorum.			PROCYON.			26	-2,49	45,68
Feb. 24	-2,11	5.39.26,98				Jan. 2	-2,45	7.31.7,84	28	-2,45	45,75
Mar. 1	-2,02	26,94	Jan. 31	-2,90	6.34.19,84	5	-2,49	7,96	29	-2,44	45,67
5	-1,95	27,12	Feb. 1	-2,90	19,78	19	-2,63	8,00	Apr. 2	-2,36	45,71
9	-1,88	26,91				24	-2,66	8,02	6	-2,29	45,79
α ORIONIS.			SIRIUS.			26	-2,66	8,00	23	-1,97	45,73
Jan. 10	-2,51	5.46.43,71	Jan. 2	-2,37	6.38.16,45	31	-2,68	8,05	24	-1,96	45,70
20	-2,49	43,74	Feb. 6	-2,35	16,67	Feb. 1	-2,68	8,02	25	-1,94	45,70
26	-2,46	43,69	16	-2,24	16,49	2	-2,68	7,90	May 8	-1,75	45,59
31	-2,44	43,72	27	-2,08	16,53	3	-2,68	8,01	23	-1,59	45,68
Feb. 1	-2,43	43,89	Mar. 5	-1,97	16,55	5	-2,67	8,08	25	-1,57	45,67
2	-2,42	43,68	June 22	-0,76	16,55	6	-2,67	8,00	June 1	-1,52	45,62
16	-2,26	43,72	July 10	-0,93	16,63	8	-2,67	8,02	22	-1,52	45,69
20	-2,21	43,68	21	-1,10	16,53	10	-2,67	7,99	July 22	-1,81	45,63
22	-2,18	43,66	22	-1,11	16,59	20	-2,60	7,96	Aug. 1	-1,98	45,85
27	-2,10	43,64	Aug. 10	-1,48	16,62	22	-2,58	7,95	4	-2,03	45,78
Mar. 1	-2,05	43,65	22	-1,76	16,59	27	-2,53	7,98	22	-2,43	45,79
5	-1,98	43,60	Sept. 5	-2,12	16,65	Mar. 1	-2,50	8,06	27	-2,55	45,88
9	-1,91	43,74	Nov. 26	-4,37	16,58	9	-2,40	7,94	28	-2,57	45,80
12	-1,86	43,65	Dec. 4	-4,54	16,70	12	-2,35	7,92	Sept. 1	-2,67	45,67
30	-1,55	43,71				13	-2,34	7,95			
Apr. 24	-1,20	43,64	ζ Geminorum.			21	-2,21	7,96	ζ Cancri.		
25	-1,19	43,71	Jan. 5	-2,75	6.54.51,24	23	-2,18	7,95	Jan. 5	-2,60	8.3.15,60
26	-1,18	43,71	Apr. 23	-1,68	51,32	26	-2,13	8,03	Feb. 2	-2,89	15,61
May 1	-1,13	43,73	24	-1,67	51,13	28	-2,10	8,11	3	-2,90	15,57
20	-1,04	43,65				Apr. 1	-2,03	8,05			
June 1	-1,07	43,70	δ Geminorum.			6	-1,95	8,11	θ Cancri.		
13	-1,15	43,67	Feb. 1	-2,92	7.10.48,13	8	-1,91	8,05	Feb. 2	-2,91	8.22.41,53
14	-1,17	43,70	2	-2,91	48,11	23	-1,67	8,03	3	-2,91	41,68
21	-1,25	43,73	Apr. 23	-1,79	48,06	25	-1,64	8,03	Mar. 28	-2,52	41,72
July 10	-1,56	43,62	24	-1,78	48,01	May 8	-1,47	8,05	29	-2,50	41,69
21	-1,79	43,68				20	-1,35	8,08			
Sept. 5	-2,99	43,56	CASTOR.			23	-1,33	8,04	Σ 1263.		
Nov. 26	-5,16	43,65	Jan. 2	-2,92	7.24.38,35	25	-1,32	8,02	Apr. 1	-2,99	8.34.51,35
27	-5,18	43,51	5	-2,96	38,21	June 1	-1,28	8,04	8	-2,83	51,45
Dec. 4	-5,30	43,56	19	-3,13	38,12	22	-1,27	7,98	9	-2,81	51,41
			Feb. 5	-3,17	38,19	July 22	-1,53	8,09	δ Cancri.		
η Geminorum.			6	-3,17	38,25	Aug. 4	-1,73	8,08	Mar. 1	-2,89	8.35.48,79
Apr. 23	-1,46	6.5.28,17	10	-3,16	38,15	22	-2,08	7,90	28	-2,58	48,87
μ Geminorum.			24	-3,03	38,20	27	-2,19	7,99	29	-2,56	48,76
Jan. 31	-2,78	6.13.31,33	27	-3,00	38,23	28	-2,21	7,97	Apr. 25	-2,14	48,78
Feb. 1	-2,77	31,43	Mar. 9	-2,84	38,19	Sept. 1	-2,30	7,83	Oct. 6	-3,10	48,78
Mar. 26	-1,96	31,33	13	-2,77	38,20				ϵ HYDRÆ.		
Apr. 23	-1,51	31,30	21	-2,62	38,28	POLLUX.			Feb. 3	-2,76	8.38.30,69
Sept. 5	-3,20	31,33	26	-2,52	38,28	Jan. 2	-2,80	7.35.45,88	19	-2,79	30,83
Nov. 26	-5,64	31,48	Apr. 6	-2,31	38,16	5	-2,84	45,78	28	-2,76	30,77
Dec. 4	-5,82	31,47	8	-2,27	38,24	19	-3,02	45,66	Mar. 28	-2,45	30,53
			May 20	-1,62	38,16	22	-3,04	45,68			
			23	-1,60	38,04	24	-3,05	45,68	Σ 1276.		
			June 22	-1,56	38,18	26	-3,06	45,67	Apr. 1	-2,45	8.38.40,02
			Aug. 4	-2,15	38,21	Feb. 2	-3,08	45,76	8	-2,34	39,92
			Sept. 1	-2,85	38,12	3	-3,08	45,72	9	-2,32	39,89
						5	-3,07	45,74			
						8	-3,07	45,72			
						10	-3,07	45,68			
						19	-3,02	45,66			
						20	-3,01	45,65			
						22	-2,99	45,75			
						24	-2,97	45,71			
						27	-2,93	45,76			
						Mar. 1	-2,90	45,76			

Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
Σ 1287.			Σ 1355.			Σ_2 210.			ρ Leonis.		
Apr. 1	-2,48	8.42.54,09	Feb. 19	-2,84	9.19.4,05	Apr. 18	-3,08	9.52.43,65	Apr. 27	-2,55	10.24.35,62
8	-2,37	54,08	α HYDRÆ.			Σ 1404.			May 25	-2,21	35,63
9	-2,36	54,08	α^0 Cancr.			Σ 1445.					
			Jan. 24	-2,54	9.19.55,26	Apr. 18	-2,47	9.56.19,94	Apr. 23	-2,55	10.24.44,75
			Feb. 3	-2,65	55,28	α^2 Cancr.			24	-2,54	44,72
			5	-2,67	55,31	Mar. 1	-2,73	55,27	29	-2,48	44,83
			28	-2,73	55,33	2	-2,72	55,25	Σ 1465.		
			Mar. 1	-2,73	55,27	6	-2,70	55,35			
			2	-2,72	55,25	13	-2,66	55,31	Σ 1470.		
			28	-2,51	55,40	28	-2,51	55,40			
			29	-2,50	55,34	30	-2,49	55,34	Apr. 23	-2,63	10.31.31,72
			Apr. 1	-2,47	55,35	Apr. 1	-2,47	55,35	24	-2,62	31,74
			2	-2,45	55,33	3	-2,44	55,35	27	-2,58	31,78
			3	-2,44	55,35	4	-2,43	55,30	Σ 1496.		
			8	-2,38	55,18	9	-2,36	55,22			
			May 13	-1,88	55,26	May 13	-1,88	55,26	Apr. 23	-3,08	10.34.1,52
			23	-1,76	55,41	23	-1,76	55,41	24	-3,06	1,37
			Sept. 27	-2,26	55,39	Sept. 27	-2,26	55,39	27	-3,00	1,30
			Oct. 6	-2,48	55,23	ξ Leonis.			Σ 1470.		
						Feb. 3	-2,78	9.23.31,99			
						Mar. 29	-2,66	31,99	Apr. 23	-2,60	10.38.20,16
						30	-2,65	31,94	24	-2,59	20,09
						Σ_2 197.			27	-2,56	20,24
						Apr. 3	-2,44	9.1.23,89	Σ_2 228.		
						8	-2,37	23,77			
						Σ 1322.			Apr. 29	-2,68	10.38.48,98
						Feb. 19	-2,95	9.3.57,90	Σ 1470.		
						Σ 1324.					
						Apr. 3	-2,73	9.4.51,81	Apr. 23	-2,60	10.38.20,16
						8	-2,66	51,80	24	-2,59	20,09
						9	-2,64	51,73	27	-2,56	20,24
						Σ 1332.			Σ_2 228.		
						Apr. 1	-2,74	9.8.18,69			
						8	-2,63	18,77	Apr. 29	-2,68	10.38.48,98
						Σ 3121.			Σ 1496.		
						Apr. 3	-2,79	9.8.37,00	Apr. 25	-2,71	10.50.5,27
						9	-2,69	36,96	27	-2,68	5,36
						Σ_2 201.			29	-2,66	5,38
						Apr. 1	-2,83	9.14.43,04	d Leonis.		
						3	-2,80	42,99	Feb. 5	-2,57	10.52.30,24
						8	-2,72	43,09	Apr. 1	-2,86	30,29
						Σ 1397.			27	-2,65	30,21
						Apr. 18	-2,66	9.47.53,17	May 25	-2,35	30,18
						Σ 205.			Σ 1501.		
						Apr. 8	-3,06	9.32.43,55			
						9	-3,04	43,51	Apr. 29	-2,81	10.53.44,86
						Σ 213.					
						Apr. 2	-2,96	10.4.18,69			
						16	-2,78	18,81			
						18	-2,75	18,50			
						Σ 217.					
						Apr. 16	-2,68	10.7.45,83			
						Σ 218.					
						Apr. 24	-2,52	10.12.22,23			
						27	-2,48	22,24			
						Σ 219.					
						Apr. 2	-2,87	10.18.27,00			
						Σ 220.					
						Apr. 16	-2,63	10.19.26,39			
						24	-2,54	26,38			
						27	-2,50	26,39			

Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
Σ 1506			B. XI. 687.			Σ 1661.			Σ 1742.		
Apr. 1	-2,91	10.56.47,59	Mar. 25	-2,96	11.38.47,60	Apr. 6	-3,02	12.28.7,67	May 25	-3,07	13.16.21,56
25	-2,68	47,62	β LEONIS.			Σ_2 254.			SPICA.		
29	-2,64	47,76	Mar. 5	-2,87	11.41.5,95	Apr. 6	-3,87	12.36.40,23	Mar. 6	-2,75	13.16.58,84
Σ_2 231.			23	-2,97	6,05	Σ 1678.			28	-3,06	58,97
Apr. 1	-3,12	11.2.29,97	26	-2,98	5,92	Σ 1680.			Apr. 1	-3,10	58,95
25	-2,89	29,98	28	-2,98	5,87	Apr. 2	-3,01	12.37.37,43	2	-3,11	58,98
29	-2,84	29,93	Apr. 1	-2,98	6,02	Σ 1680.			3	-3,11	58,98
Piazzi XI. 14.			16	-2,92	5,97	Apr. 2	-3,03	12.41.31,36	4	-3,12	58,95
Apr. 25	-3,00	11.6.29,01	17	-2,92	6,02	6	-3,05	31,65	10	-3,17	58,91
29	-2,94	29,04	18	-2,91	6,03	Σ 1699.			16	-3,20	58,83
ϕ Leonis.			27	-2,85	5,98	Apr. 6	-3,04	12.45.36,89	22	-3,22	59,02
Feb. 5	-2,50	11.8.43,87	29	-2,84	6,02	ψ Virginis.			23	-3,23	58,92
Apr. 1	-2,88	43,97	May 1	-2,82	5,92	Mar. 6	-2,79	12.46.14,69	27	-3,23	58,93
Σ 1530.			13	-2,71	6,03	May 27	-3,00	14,79	29	-3,24	58,91
Feb. 19	-2,72	11.11.50,09	27	-2,56	5,97	Σ 1699.			May 1	-3,24	58,98
Mar. 6	-2,87	50,25	Aug. 30	-1,80	5,99	Apr. 6	-3,07	12.51.9,31	6	-3,24	58,95
σ Leonis.			Sept. 18	-1,86	5,89	Σ_2 260.			8	-3,24	58,90
Apr. 29	-2,72	11.13.5,56	Oct. 6	-2,03	5,97	Apr. 6	-3,06	13.0.33,94	10	-3,24	58,97
Σ 1534.			10	-2,09	5,89	θ Virginis.			16	-3,23	58,91
Apr. 1	-2,99	11.13.38,89	22	-2,29	5,91	Apr. 2	-3,04	13.1.52,90	27	-3,19	58,96
17	-2,89	38,81	27	-2,38	5,94	3	-3,06	52,83	31	-3,16	58,85
25	-2,82	38,81	β Virginis.			α Comæ.			June 1	-3,15	58,96
Σ 1535.			Mar. 5	-2,88	11.42.34,01	May 25	-2,92	13.2.23,92	14	-3,07	59,01
Apr. 29	-2,73	11.14.54,40	Apr. 1	-2,99	34,30	Σ 1760.			July 22	-2,69	59,02
e Leonis.			2	-3,00	34,23	May 17	-3,04	13.27.4,61	Aug. 17	-2,39	59,03
Mar. 5	-2,86	11.22.20,50	May 27	-2,62	34,38	25	-2,98	4,72	27	-2,30	58,97
Σ_2 234.			Σ 1576.			B. XIII. 375.			30	-2,27	59,04
Apr. 29	-3,04	11.22.22,25	Apr. 29	-2,96	11.44.47,67	May 8	-3,23	13.22.44,70	Oct. 30	-2,37	59,01
Σ 1558.			Σ 1581.			25	-3,19	44,81	Nov. 20	-2,78	58,89
Apr. 17	-2,98	11.28.32,69	Apr. 1	-3,45	11.47.59,61	B.A.C. 4530.			Dec. 4	-3,14	58,89
ν Leonis.			Σ 3078.			May 1	-3,17	13.26.19,30	Σ 1760.		
Apr. 29	-2,79	11.28.57,82	Apr. 1	-3,00	12.1.19,03	31	-3,10	19,31	May 17	-3,04	13.27.4,61
η Virginis.			Σ 1558.			Σ 1733.			25	-2,95	26,98
Apr. 1	-2,99	12.11.55,67	Apr. 17	-2,98	11.28.32,69	May 17	-3,00	13.8.41,51	m Virginis.		
2	-3,00	55,61	ν Leonis.			27	-3,10	22,49	May 8	-3,27	13.33.25,86
29	-2,95	55,66	Apr. 29	-3,05	44,09	B. XIII 113.			Piazzi XIII. 163.		
30	-2,94	55,76	30	-3,05	44,12	May 25	-2,95	41,44	May 27	-2,98	13.33.27,06
May 27	-2,76	55,71	q Virginis.			Σ 1733.			31	-2,95	26,98
H. C. 23132.			Mar. 5	-2,81	12.25.43,90	Σ 1733.			Σ 1760.		
Σ 1558.			6	-2,84	44,08	May 25	-3,11	13.7.22,61	May 17	-3,04	13.27.4,61
Apr. 17	-2,98	11.28.32,69	Apr. 29	-3,05	44,09	27	-3,10	22,49	25	-2,98	4,72
ν Leonis.			30	-3,05	44,12	Σ 1733.			m Virginis.		
Apr. 29	-2,79	11.28.57,82	q Virginis.			May 17	-3,00	13.8.41,51	May 8	-3,27	13.33.25,86
Σ 1558.			Mar. 5	-2,81	12.25.43,90	25	-2,95	41,44	Piazzi XIII. 163.		
Apr. 17	-2,98	11.28.32,69	6	-2,84	44,08	Σ 1733.			May 27	-2,98	13.33.27,06
ν Leonis.			Apr. 29	-3,05	44,09	May 25	-2,95	41,44	31	-2,95	26,98
Apr. 29	-2,79	11.28.57,82	30	-3,05	44,12	Σ 1733.			Σ 1760.		

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	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
Σ 1776.			ARCTURUS.			ϵ BOOTIS continued.			α CORONÆ BOREALIS continued.		
May 17	-3,13	13.35.20,88	Apr. 3	-2,86	14.8.32,77	Oct. 7	-1,44	14.38.10,58	Sept. 6	-2,00	15.28.5,17
B. XIII. 638.			4	-2,87	32,96	11	-1,42	10,55	26	-1,67	5,22
			6	-2,89	32,92	Nov. 20	-1,60	10,51	30	-1,61	5,28
May 25	-3,27	13.36.25,12	10	-2,94	32,92	25	-1,67	10,53	Oct. 23	-1,37	5,15
27	-3,26	25,16	16	-2,99	32,90	26	-1,69	10,64	Nov. 25	-1,48	5,19
Σ 1781.			17	-3,00	32,95	α^s LIBRÆ.			α SERPENTIS.		
			18	-3,01	32,90	Apr. 8	-3,21	14.42.15,40	May 13	-3,13	15.36.35,39
			22	-3,04	32,86	17	-3,34	15,39	16	-3,32	35,32
			30	-3,08	32,88	May 1	-3,50	15,50	17	-3,33	35,39
			May 6	-3,09	32,90	2	-3,51	15,56	June 14	-3,45	35,27
Apr. 3	-2,98	13.38.17,22	18	-3,10	32,92	6	-3,54	15,54	15	-3,45	35,33
May 1	-3,15	16,97	27	-3,08	32,86	17	-3,61	15,53	22	-3,44	35,37
B.A.C. 4591.			June 14	-2,97	32,88	25	-3,64	15,59	July 20	-3,26	35,42
			29	-2,83	32,87	27	-3,64	15,56	Aug. 17	-2,89	35,26
			July 11	-2,68	32,90	31	-3,65	15,57	Dec. 5	-2,33	35,09
			15	-2,63	32,89	June 29	-3,56	15,57	Σ 1898.		
			22	-2,54	32,99	July 20	-3,37	15,57	Piazzì XV. 220.		
			Aug. 20	-2,11	32,93	Aug. 29	-2,83	15,52	May 31	-3,49	15.49.27,06
			27	-2,01	32,87	β Bootis.			δ Scorpii.		
			Sept. 2	-1,94	32,97	May 14	-3,37	14.52.36,58	May 2	-3,68	15.51.7,17
			24	-1,70	32,93	β^1 Scorpii.			Σ 2007.		
			26	-1,68	32,89	July 11	-2,62	14.56.4,18	July 15	-2,69	15.58.46,69
			27	-1,67	33,06	15	-2,54	4,20	δ ORIONIS.		
			30	-1,65	32,99	17	-2,50	4,17	Apr. 24	-3,14	16.6.10,56
			Oct. 11	-1,62	32,95	Σ 1908.			25	-3,16	10,65
			17	-1,61	32,98	May 14	-3,13	14.58.39,85	29	-3,23	10,67
			Nov. 20	-1,94	32,93	Σ 1935.			May 16	-3,48	10,59
			Dec. 4	-2,23	32,86	May 17	-3,15	15.13.48,26	18	-3,50	10,66
			5	-2,26	33,07	Σ 1942.			June 15	-3,70	10,54
			Σ 1825.			Σ 1953.			July 15	-3,64	10,53
			May 8	-3,13	14.9.17,57	May 13	-3,31	15.25.14,53	24	-3,57	10,55
			17	-3,13	17,78	α CORONÆ BOREALIS.			29	-3,52	10,56
			λ Virginis.			May 13	-3,13	15.28.5,07	Sept. 7	-2,94	10,63
			Apr. 3	-3,11	14.10.40,77	16	-3,15	5,08	ANTARES.		
			May 1	-3,41	40,62	17	-3,15	5,03	Apr. 25	-3,60	16.19.51,06
			2	-3,41	40,69	June 14	-3,18	5,10	27	-3,65	51,08
			Σ 1870.			15	-3,18	5,11	29	-3,70	51,01
			May 17	-3,26	14.35.15,60	29	-3,10	4,98	30	-3,72	51,24
			ϵ BOOTIS.			July 20	-2,85	5,19	May 2	-3,76	51,25
			Apr. 8	-2,85	14.38.10,47	Aug. 14	-2,44	5,01	16	-4,01	51,13
			18	-2,98	10,45	17	-2,39	5,21	18	-4,04	51,07
			22	-3,02	10,56	Σ 1812.			June 13	-4,31	51,24
			May 2	-3,09	10,48	Apr. 16	-3,03	14.5.29,65	July 20	-4,27	51,05
			6	-3,11	10,48	17	-3,03	29,67			
			17	-3,14	10,56						
			18	-3,14	10,40						
			27	-3,13	10,47						
			31	-3,12	10,32						
			June 29	-2,91	10,45						
			July 11	-2,75	10,45						
			15	-2,70	10,46						
			17	-2,67	10,44						
			20	-2,62	10,49						
			Aug. 2	-2,41	10,60						
			20	-2,11	10,55						
			29	-1,95	10,54						

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	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
ANTARES continued.			α OPHIUCHI continued.			β LYRÆ.			B.A.C. 6590.		
July 24	-4,24	16.19.51,13	July 24	-3,60	17.27.41,79	Jan. 14	+0,66	18.44.19,20	Sept. 19	-4,01	19.10.6,27
29	-4,19	51,22	27	-3,57	41,72	31	+0,37	19,20	25	-3,91	6,61
Sept. 7	-3,56	51,21	29	-3,56	41,75	Feb. 2	+0,32	19,30	26	-3,89	6,24
19	-3,35	51,20	Aug. 17	-3,34	41,72	July 23	-3,55	19,20	27	-3,87	6,32
Σ 2104.			Sept. 2	-3,09	41,80	Sept. 5	-3,00	19,33	28	-3,85	6,48
			19	-2,78	41,80	ν^1 Sagittarii.			30	-3,82	6,23
			Nov. 20	-2,00	41,71	Σ 2499.					
July 17	-3,08	16.43.6,18	26	-1,99	41,68	Σ 2415.					
η Ophiuchi.			27	-1,99	41,86						
			Dec. 6	-2,03	41,82	Sept. 19	-4,09	18.44.45,00	Aug. 10	-3,72	19.11.53,21
			Σ_2 333.						17	-3,66	53,26
									29	-3,53	53,12
July 17	-4,17	17.1.26,28	July 29	-3,60	17.29.31,23				ρ^1 Sagittarii.		
α HERCULIS.			Σ 2198.								
July 17	-3,53	17.7.32,34									
20	-3,51	32,22	July 29	-3,34	17.36.22,48	σ Sagittarii.			ρ^2 Sagittarii.		
24	-3,48	32,20	Σ 2217.								
27	-3,46	32,26				Sept. 19	-4,12	18.55.19,93	Sept. 26	-3,98	19.12.44,77
29	-3,44	32,17				25	-4,02	20,04	27	-3,96	44,85
Sept. 2	-2,94	32,33				B.A.C. 6525.			28	-3,94	44,96
6	-2,87	32,18	July 29	-3,57	17.39.35,43						
Nov. 9	-1,92	32,29	Piazzi XVII. 260.			Aug. 17	-4,82	18.57.41,22	\ast N.P.D. 110°. 56'.		
26	-1,90	32,20				Sept. 2	-4,63	41,16	Sept. 19	-4,18	19.13.26,35
27	-1,91	32,26	July 29	-3,72	17.43.1,96	19	-4,35	41,36	25	-4,07	26,58
Σ 2147.			δ Sagittarii.			ζ Aquilæ.			30	-3,98	26,22
July 17	-3,31	17.11.29,53	Sept. 19	-3,83	17.50.16,17				Σ 2504.		
Σ 2157.			μ^1 SAGITTARII.			Sept. 5	-3,52	18.58.14,43			
July 24	-3,48	17.15.54,19	July 27	-4,51	18.4.26,23	H. C. 35760.			Aug. 10	-3,77	19.14.7,52
29	-3,44	54,12	Sept. 7	-4,06	26,09				17	-3,72	7,55
ρ Herculis.			19	-3,84	26,10	Sept. 25	-2,60	18.58.32,44	Piazzi XIX. 85.		
			λ Sagittarii.			26	-2,57	32,28			
July 24	-3,13	17.18.18,24				27	-2,55	32,36	Aug. 29	-4,04	19.14.21,29
29	-3,06	18,06	July 27	-4,71	18.18.20,71	Σ 2466.			B.A.C. 6639.		
c^2 Ophiuchi.			δ URSE MINORIS.			Aug. 17	-3,49	19.1.48,48	Aug. 10	-4,94	19.17.4,61
			Jan. 28	+27,31	18.22.38,39	Sept. 25	-2,80	48,53	17	-4,90	4,71
July 17	-4,49	17.21.54,22	28	+27,31	38,79	26	-2,77	48,54	e^1 Sagittarii.		
Σ 2173.			29	+27,23	38,54	\ast N.P.D. 71°. 3'.					
			31	+26,85	38,64				Sept. 25	-4,03	19.31.47,11
July 24	-3,85	17.22.22,28	31	+26,85	38,07	Sept. 19	-3,20	19.5.36,34	26	-4,02	46,91
29	-3,82	22,25	Feb. 1	+26,77	38,34	26	-3,07	36,31	27	-4,01	46,96
Piazzi XVII. 135.			2	+26,54	38,82	27	-3,05	36,42	Σ 2556.		
			3	+26,44	38,81	Σ 2484.					
			8	+25,25	39,65	Aug. 10	-3,75	19.7.24,15	Aug. 10	-3,79	19.32.44,27
July 29	-3,74	17.24.14,03	8	+25,13	39,78	17	-3,69	24,11	17	-3,75	44,10
α OPHIUCHI.			Mar. 11	+15,66	39,81	Σ 2489.			20	-3,73	44,16
			11	+15,51	39,30				e^2 Sagittarii.		
Jan. 19	-0,04	17.27.41,71	12	+15,35	38,62	Aug. 10	-3,82	19.9.18,30			
June 29	-3,64	41,88	July 21	-3,73	38,88				July 27	-4,50	19.33.35,64
July 17	-3,63	41,71	22	-3,53	39,25				Aug. 29	-4,41	35,49
23	-3,61	41,77	23	-3,43	39,27						
			Aug. 10	+1,51	40,29						
			10	+1,67	40,31						
			20	+4,73	39,74						
			22	+5,68	39,27						

Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
γ AQUILÆ.			β AQUILÆ continued.			Σ 2658.			Σ 2738.		
Sept. 5	-3,77	19.38.50,61	Aug. 20	-4,03	19.47.39,05	Aug. 30	-3,47	20.9.32,34	Aug. 7	-4,05	20.51.16,41
19	-3,58	50,60	27	-3,98	39,03	31	-3,45	32,03	Sept. 6	-4,01	16,42
20	-3,56	50,64	29	-3,96	39,08	Sept. 2	-3,41	32,27	θ Capricorni.		
25	-3,47	50,63	30	-3,95	39,10	6	-3,32	32,04	Σ 2671.		
27	-3,44	50,59	Sept. 6	-3,88	39,07	Σ 2671.			Aug. 27	-4,60	20.57.10,30
28	-3,42	50,61	10	-3,83	38,99	Σ 2681.			Sept. 6	-4,55	10,17
30	-3,39	50,46	18	-3,72	39,02	Aug. 7	-3,81	20.14.33,52	10	-4,53	10,34
Oct. 10	-3,22	50,56	19	-3,71	39,01	30	-3,50	33,93	\ast N.P.D. 100°. 50'.		
Nov. 20	-2,59	50,58	25	-3,64	39,04	31	-3,48	33,64	Σ 2576.		
Σ 2576.			26	-3,56	39,05	Σ 2681.			Aug. 10	-3,69	19.39.37,96
Σ 2576.			\ast N.P.D. 57°. 8'.			Σ 2681.			20	-3,60	38,07
Σ 2576.			Aug. 17	-3,70	19.52.19,01	Aug. 7	-3,82	20.18.37,65	Sept. 6	-4,38	21.2.18,36
Σ 2576.			20	-3,68	18,98	30	-3,55	37,88	21	-4,29	18,25
Σ 2576.			29	-3,58	19,14	ρ Capricorni.			\ast N.P.D. 99°. 59'.		
57 Sagittarii.			Σ 2606.			Aug. 31	-4,55	20.19.57,20	Aug. 27	-4,44	21.2.21,83
α AQUILÆ.			Aug. 7	-3,76	19.52.31,63	Sept. 19	-4,35	57,40	Sept. 10	-4,38	21,98
α AQUILÆ.			17	-3,70	31,67	ζ Cygni.			19	-4,30	21,98
α AQUILÆ.			Σ 2607.			B.A.C. 7049.			Σ 2776.		
α AQUILÆ.			Aug. 31	-3,43	19.52.41,69	Sept. 2	-4,66	20.20.21,70	Sept. 21	-4,31	21.6.57,90
α AQUILÆ.			16 Vulpeculæ.			6	-4,62	21,80	24	-4,28	57,95
α AQUILÆ.			Aug. 31	-3,68	19.55.24,52	B.A.C. 7079.			25	-4,27	57,85
α AQUILÆ.			Σ 2626.			Aug. 28	-4,03	20.23.44,96	B. XXI. 222.		
α AQUILÆ.			Aug. 7	-3,80	19.58.1,23	ν Capricorni.			Sept. 19	-4,37	21.9.59,46
α AQUILÆ.			20	-3,74	1,14	Sept. 21	-4,37	20.31.9,80	21	-4,35	59,40
α AQUILÆ.			30	-3,64	1,31	ϵ Aquarii.			24	-4,32	59,53
α AQUILÆ.			Sept. 6	-3,54	1,11	July 29	-4,32	20.39.13,55	25	-4,31	59,65
α AQUILÆ.			Σ 2627.			Sept. 19	-4,23	13,66	26	-4,30	59,48
α AQUILÆ.			Aug. 31	-4,02	19.59.57,33	21	-4,21	13,67	27	-4,29	59,62
α AQUILÆ.			Σ 2643.			24	-4,17	13,71	ι Capricorni.		
α AQUILÆ.			Aug. 7	-4,26	20.4.38,14	4 Aquarii.			Sept. 6	-4,56	21.13.33,27
α AQUILÆ.			30	-4,19	38,25	Aug. 7	-4,33	20.43.9,28	β AQUARIÆ.		
α AQUILÆ.			31	-4,18	37,95	5 Aquarii.			July 29	-4,19	21.23.20,54
α AQUILÆ.			Sept. 6	-4,13	37,95	Aug. 31	-4,33	20.43.53,40	Aug. 7	-4,29	20,63
α^2 CAPRICORNI.			α^2 CAPRICORNI.			Sept. 6	-4,30	53,50	10	-4,31	20,61
α^2 CAPRICORNI.			July 15	-4,27	20.9.23,75	μ Aquarii.			27	-4,39	20,63
α^2 CAPRICORNI.			27	-4,40	23,86	Sept. 10	-4,33	20.44.14,13	28	-4,39	20,53
α^2 CAPRICORNI.			29	-4,42	23,71	19	-4,23	14,13	Sept. 6	-4,37	20,51
α^2 CAPRICORNI.			Aug. 2	-4,44	23,68	21	-4,22	14,10	10	-4,35	20,68
α^2 CAPRICORNI.			7	-4,46	23,81	Σ 2631.			18	-4,30	20,56
α^2 CAPRICORNI.			Sept. 7	-4,34	23,65	Aug. 7	-3,81	20.14.33,52	19	-4,29	20,66
α^2 CAPRICORNI.			10	-4,30	23,72	30	-3,50	33,93	21	-4,27	20,57
α^2 CAPRICORNI.			19	-4,19	23,69	31	-3,48	33,64	Σ 2631.		
α^2 CAPRICORNI.			25	-4,11	23,80	ρ Capricorni.			Aug. 7	-3,82	20.18.37,65
α^2 CAPRICORNI.			27	-4,08	23,83	30	-3,55	37,88	30	-3,55	37,88
α^2 CAPRICORNI.			30	-4,03	23,64	ζ Cygni.			Σ 2631.		
α^2 CAPRICORNI.			Oct. 4	-3,97	23,78	B. XXI. 222.			Aug. 7	-3,82	20.18.37,65
α^2 CAPRICORNI.			10	-3,87	23,75	Sept. 21	-4,37	20.31.9,80	30	-3,55	37,88
β AQUILÆ.			β AQUILÆ.			ϵ Aquarii.			ν Capricorni.		
β AQUILÆ.			July 27	-4,04	19.47.38,92	July 29	-4,32	20.39.13,55	Sept. 21	-4,37	20.31.9,80
β AQUILÆ.			Aug. 2	-4,06	38,98	Sept. 19	-4,23	13,66	ϵ Aquarii.		
β AQUILÆ.			7	-4,07	39,02	21	-4,21	13,67	July 29	-4,32	20.39.13,55
β AQUILÆ.			10	-4,06	39,01	24	-4,17	13,71	Sept. 19	-4,23	13,66
β AQUILÆ.			17	-4,04	38,99	4 Aquarii.			21	-4,21	13,67
β AQUILÆ.			β AQUILÆ.			5 Aquarii.			24	-4,17	13,71
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			ι Capricorni.		
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			Sept. 6	-4,56	21.13.33,27
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			β AQUARIÆ.		
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			July 29	-4,19	21.23.20,54
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			Aug. 7	-4,29	20,63
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			10	-4,31	20,61
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			27	-4,39	20,63
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			28	-4,39	20,53
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			Sept. 6	-4,37	20,51
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			10	-4,35	20,68
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			18	-4,30	20,56
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			19	-4,29	20,66
β AQUILÆ.			β AQUILÆ.			μ Aquarii.			21	-4,27	20,57

Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1844.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
β AQUARIII continued.			Σ 2878.			η Aquarii.			α PEGASI continued.		
Sept. 24	-4,25	21.23.20,53	Aug. 27	-4,28	22.6.42,64	Aug. 27	-4,34	22.27.20,26	Oct. 10	-4,33	22.56.59,68
30	-4,18	20,55	Sept. 10	-4,30	42,50	28	-4,34	20,39	17	-4,28	59,72
Oct. 2	-4,16	20,55	Σ 2882.			Sept. 24	-4,36	20,39	23	-4,22	59,69
7	-4,10	20,53	Aug. 28			κ Aquarii.			26	-4,19	59,60
Dec. 5	-3,30	(20,89)	Σ 2889.			Aug. 27			28	-4,17	59,64
6	-3,29	20,69	Sept. 25			28			Nov. 9	-4,03	59,60
ξ Aquarii.			Sept. 25			ζ Pegasi.			20	-3,90	59,80
Aug. 27	-4,43	21.29.26,59	ϵ Cephei.			Dec. 3			21	-3,88	59,65
28	-4,44	26,58	Sept. 27			\ast N.P.D. 24°. 16'.			Dec. 3	-3,73	59,63
Sept. 10	-4,40	26,62	28			Sept. 27			5	-3,70	59,81
λ Capricorni.			30			28			γ Piscium.		
July 29	-4,23	21.38.8,05	γ Aquarii.			Aug. 27			Sept. 24	-4,48	23.9.4,54
Aug. 27	-4,49	8,01	Sept. 24			28			25	-4,46	4,75
\ast N.P.D. 71°. 29'.			Σ 2834.			κ Piscium.			Aug. 28		
Sept. 10	-4,17	21.43.38,92	Aug. 20			Aug. 28			29	-4,29	23.18.55,99
Σ 2834.			Σ 2848.			Sept. 10			29	-4,31	56,22
Aug. 20	-4,18	21.44.20,25	Σ 2902.			Aug. 27			Sept. 24	-4,44	56,12
Aug. 20			Aug. 28			28			25	-4,45	56,14
Σ 2848.			Sept. 27			Aug. 28			ι Piscium.		
30 Aquarii.			28			Sept. 10			Aug. 28	-4,28	23.31.55,56
Aug. 20	-4,38	21.55.3,91	B. XXII. 425.			Aug. 28			29	-4,29	55,75
27	-4,41	3,86	Sept. 10			Aug. 28			Dec. 3	-3,99	55,62
α AQUARIII.			Oct. 7			β Piscium.			ω Piscium.		
Aug. 10	-4,21	21.57.46,24	Nov. 9			Aug. 27			Sept. 25	-4,50	23.51.18,27
20	-4,30	46,20	Σ 2905.			28			26	-4,50	18,10
27	-4,34	46,20	Sept. 27			β Pegasi.			Σ 3057.		
28	-4,34	46,13	28			Sept. 27			Nov. 9	-5,44	23.56.54,33
Sept. 6	-4,35	46,26	30			28			21	-5,17	54,51
7	-4,35	46,16	Σ 2916.			α PEGASI.			\ast N.P.D. 26°. 11'.		
10	-4,34	46,18	Sept. 10			Jan. 1			Sept. 2	-6,12	23.56.10,70
19	-4,32	46,25	27			20			33 Piscium.		
21	-4,30	46,18	28			Feb. 1			Sept. 26	-4,47	23.57.20,92
24	-4,28	46,20	30			5			27	-4,48	20,98
28	-4,25	46,21	Σ 2916.			8			Σ 3062.		
Oct. 2	-4,22	46,23	Sept. 10			13			Oct. 4	-5,85	23.58.8,35
4	-4,20	46,28	27			Apr. 9			10	-5,83	8,32
26	-3,94	46,20	28			May 10					
Nov. 9	-3,75	46,07	Sept. 10			Sept. 2					
Dec. 3	-3,44	46,29	27			10					
5	-3,41	46,15	28			Oct. 3					

CATALOGUE OF THE CONCLUDED MEAN RIGHT ASCENSIONS, JAN. 1, 1844;
WITH THE ANNUAL VARIATIONS.

Name of Star.	Approximate N.P.D. Jan. 1, 1844.	Number of Obser- vations.	Mean R.A. Jan. 1, 1844.	Annual Variation.	Name of Star.	Approximate N.P.D. Jan. 1, 1844.	Number of Obser- vations.	Mean R.A. Jan. 1, 1844.	Annual Variation.
	° ' "		h. m. s.	s.		° ' "		h. m. s.	s.
H. C. 47310.....	53.36	2	0. 0. 0,73	+ 3,070	B.A.C. 845.....	80.33	3	2.36.31,07	+ 3,211
α ANDROMEDÆ.....	61.46	39	0. 0. 20,12	+ 3,072	π Arietis. <i>np</i>	73.11	4	2.40.35,84	+ 3,331
Σ 1. <i>sf</i>	53.39	1	0. 0. 49,04	+ 3,074	ϵ Arietis.....	69.17	1	2.50.18,20	+ 3,413
Σ 4. <i>sf</i>	82.25	1	0. 1. 51,08	+ 3,072	α CETI.....	86.32	15	2.54. 7,84	+ 3,126
34 Piscium. <i>np</i>	79.43	2	0. 2. 1,46	+ 3,073	δ Arietis.....	70.52	1	3. 2. 43,19	+ 3,402
γ Pegasi.....	75.41	3	0. 5. 12,71	+ 3,078	ζ Arietis.....	69.32	2	3. 5. 56,77	+ 3,432
Σ 25.....	74.52	1	0. 10. 39,42	+ 3,087	ζ Eridani.....	99.24	1	3. 8. 15,86	+ 2,909
d Piscium.....	82.41	4	0. 12. 34,50	+ 3,080	g Arietis.....	65.50	3	3. 15. 6,55	+ 3,522
12 Ceti.....	94.49	2	0. 22. 4,72	+ 3,060	19 Tauri.....	66. 2	1	3. 35. 56,07	+ 3,552
β CETI.....	108.51	5	0. 35. 45,36	+ 3,000	η Tauri.....	66.23	4	3. 38. 13,44	+ 3,547
* (Mag. 9).....	78.19	2	0. 38. 47,75	+ 3,117	B. III. 805.....	97.30	1	3. 41. 10,54	+ 2,926
58 Piscium.....	78.53	2	0. 38. 53,60	+ 3,116	H. C. 7074.....	66.31	1	3. 41. 36,19	+ 3,549
δ Piscium.....	83.16	2	0. 40. 35,51	+ 3,099	γ Eridani.....	103.57	2	3. 50. 45,26	+ 2,790
i Piscium. <i>np</i>	63. 8	3	0. 41. 31,14	+ 3,193	A^1 Tauri.....	68.21	1	3. 55. 28,81	+ 3,525
Piazzì O. 208.....	78. 4	3	0. 43. 25,26	+ 3,124	ω^2 Tauri.....	69.49	3	4. 8. 7,74	+ 3,505
20 Ceti.....	92. 0	2	0. 45. 2,17	+ 3,062	ϵ Tauri.....	71.10	1	4. 19. 30,86	+ 3,483
ϕ^3 Ceti.....	102. 7	3	0. 48. 12,12	+ 3,011	ALDEBARAN.....	73.49	29	4. 26. 58,56	+ 3,427
* (Mag. 8, 9).....	103. 5	2	0. 49. 47,18	+ 3,003	2 Camelopardi. <i>sf</i> ..	36.51	1	4. 27. 38,10	+ 4,712
ϕ^4 Ceti.....	102.13	4	0. 50. 55,14	+ 3,007	ι Aurigæ.....	57. 5	1	4. 46. 50,59	+ 3,892
B. o. 962.....	101.30	4	0. 54. 28,34	+ 3,006	RIGEL. <i>nf</i>	98.23	33	5. 7. 2,61	+ 2,879
ϵ Piscium.....	82.57	5	0. 54. 51,15	+ 3,110	B. v. 294.....	85.41	6	5. 12. 48,18	+ 3,169
* (Mag. 9).....	99.30	5	0. 58. 7,42	+ 3,014	B. v. 303.....	86. 9	5	5. 13. 5,96	+ 3,159
28 Ceti.....	100.41	2	0. 58. 15,61	+ 3,007	B. v. 324.....	84.46	3	5. 13. 52,38	+ 3,190
31 Cassiopeïæ.....	22. 3	3	1. 0. 10,84	+ 3,927	B.A.C. 1661.....	86.35	4	5. 13. 53,59	+ 3,149
e Piscium.....	85.11	1	1. 0. 20,14	+ 3,100	m Orionis. <i>sp</i>	86.37	3	5. 14. 38,32	+ 3,148
η Ceti.....	101. 1	3	1. 0. 44,60	+ 3,002	B. v. 356.....	84.50	4	5. 15. 13,33	+ 3,189
32 Ceti.....	99.44	3	1. 2. 22,61	+ 3,009	* (Mag. 9).....	85.30	6	5. 15. 21,38	+ 3,174
POLARIS. <i>nf</i>	1.31	42	1. 3. 17,87	+16,920	β TAURI.....	61.32	21	5. 16. 26,08	+ 3,783
B. I. 51.....	98.46	2	1. 3. 51,07	+ 3,014	B. v. 399.....	85.57	3	5. 17. 0,36	+ 3,163
36 Ceti.....	97.37	1	1. 4. 56,63	+ 3,021	* (Mag. 9, 10).....	85.22	6	5. 18. 25,44	+ 3,177
37 Ceti.....	98.46	2	1. 6. 32,70	+ 3,012	A Orionis. <i>nf</i>	84.11	6	5. 22. 26,41	+ 3,205
B. I. 186.....	96. 9	2	1. 11. 43,90	+ 3,026	B. v. 623.....	83.56	4	5. 24. 54,14	+ 3,211
B. I. 223.....	94.15	1	1. 13. 47,16	+ 3,039	α Leporis.....	107.56	2	5. 25. 21,23	+ 2,643
B. I. 228.....	95.23	1	1. 14. 14,11	+ 3,030	* (Mag. 8, 9).....	83.33	3	5. 26. 22,93	+ 3,220
θ Ceti.....	98.59	3	1. 16. 13,62	+ 3,002	* (Mag. 8, 9).....	83.21	3	5. 27. 0,40	+ 3,225
B. I. 276.....	91.47	1	1. 16. 43,40	+ 3,057	ϵ Orionis.....	91.18	1	5. 28. 18,23	+ 3,040
η Piscium.....	75.28	2	1. 23. 8,81	+ 3,193	ζ Tauri.....	68.58	3	5. 28. 19,45	+ 3,580
B. I. 497.....	87. 1	1	1. 28. 22,39	+ 3,097	125 Tauri.....	64.12	2	5. 30. 4,21	+ 3,712
π Piscium.....	78.40	2	1. 28. 50,14	+ 3,172	B. v. 802.....	82.47	5	5. 31. 18,47	+ 3,238
105 Piscium.....	74.23	3	1. 31. 16,44	+ 3,215	* (Mag. 9).....	82.26	2	5. 34. 31,60	+ 3,247
B. I. 568.....	85.52	1	1. 32. 1,29	+ 3,108	B. v. 925.....	82.39	3	5. 35. 35,95	+ 3,242
B. I. 576.....	83.42	1	1. 32. 14,15	+ 3,128	B Tauri.....	65.29	1	5. 39. 26,63	+ 3,678
B.A.C. 549.....	73.46	3	1. 39. 54,50	+ 3,235	α V. 1015.....	82. 6	4	5. 39. 26,99	+ 3,255
B. I. 736.....	83. 6	1	1. 40. 29,36	+ 3,139	α ORIONIS.....	82.38	30	5. 46. 43,68	+ 3,243
β Arietis.....	69.57	4	1. 46. 2,03	+ 3,288	B. v. 1359.....	80.56	2	5. 52. 44,90	+ 3,284
γ Andromedæ. <i>sp</i> ..	48.25	1	1. 54. 20,92	+ 3,638	η Geminorum.....	67.27	1	6. 5. 28,17	+ 3,626
10 Arietis. <i>sp</i>	64.49	3	1. 54. 48,92	+ 3,373	μ Geminorum.....	67.25	7	6. 13. 31,38	+ 3,626
B. I. 988.....	79. 6	1	1. 54. 57,23	+ 3,194	γ Geminorum.....	73.28	3	6. 28. 41,96	+ 3,464
B.A.C. 632.....	72.30	3	1. 55. 9,91	+ 3,274	ϵ Geminorum.....	64.43	2	6. 34. 19,81	+ 3,695
α ARIETIS.....	67.17	17	1. 58. 23,54	+ 3,347	SIRIUS.....	106.30	14	6. 38. 16,58	+ 2,646
B.A.C. 650.....	72.43	3	1. 59. 12,86	+ 3,277	ζ Geminorum.....	69.12	3	6. 54. 51,23	+ 3,563
θ Arietis.....	70.49	2	2. 9. 27,63	+ 3,320	δ Geminorum. <i>nf</i> ..	67.44	4	7. 10. 48,08	+ 3,592
27 Arietis.....	72.59	6	2. 22. 15,88	+ 3,308	CASTOR. <i>nf</i>	57.47	20	7. 24. 38,20	+ 3,856
Σ 274. <i>nf</i>	89.36	1	2. 23. 29,27	+ 3,076	k Geminorum.....	73.51	2	7. 24. 42,07	+ 3,432
29 Arietis.....	75.40	4	2. 24. 22,08	+ 3,272	PROCYON.....	84.23	41	7. 31. 8,00	+ 3,145
B.A.C. 797.....	66. 2	1	2. 28. 1,88	+ 3,429	POLLUX.....	61.36	38	7. 35. 45,71	+ 3,683
ν Arietis.....	68.43	1	2. 29. 58,18	+ 3,388	* ζ Cancr. <i>np</i> *.....	71.53	3	8. 3. 13,59	+ 3,447
δ Ceti.....	90.21	1	2. 31. 29,67	+ 3,066	θ Cancr.	71.23	4	8. 22. 41,66	+ 3,437
H. C. 4925.....	73.57	5	2. 31. 30,86	+ 3,307	Σ 1263. <i>sp</i>	47.44	3	8. 34. 51,40	+ 4,019
μ Arietis.....	70.39	3	2. 33. 34,95	+ 3,362	δ Cancr.	71.17	5	8. 35. 48,80	+ 3,423
γ Ceti. <i>sf</i>	87.26	2	2. 35. 13,36	+ 3,109	ϵ HYDRÆ. <i>nf</i>	83. 1	4	8. 38. 30,71	+ 3,197

* The close double-star.

Name of Star.	Approximate N.P.D. Jan. 1, 1844.	Number of Obser- vations.	Mean R.A. Jan. 1, 1844.	Annual Variation.	Name of Star.	Approximate N.P.D. Jan. 1, 1844.	Number of Obser- vations.	Mean R.A. Jan. 1, 1844.	Annual Variation.
	° ' "		h. m. s.	s.		° ' "		h. m. s.	s.
Σ 1276. <i>np.</i>	78. 16	3	8. 38. 39.94	+ 3,284	Σ 1699.....	61. 41	1	12. 51. 9.31	+ 2,911
Σ 1287. <i>np.</i>	77. 17	3	8. 42. 54.08	+ 3,299	Σ 260.....	62. 13	1	13. 0. 33.94	+ 2,887
α ² Cancrī.....	73. 49	1	8. 48. 52.16	+ 3,358	θ Virginis. <i>sf.</i>	94. 42	2	13. 1. 52.87	+ 3,100
Σ 1297. <i>np.</i>	77. 33	1	8. 49. 57.09	+ 3,289	α Comæ.....	71. 39	1	13. 2. 23.92	+ 2,951
κ Cancrī.....	66. 40	3	8. 51. 29.68	+ 3,493	53 Virginis.....	105. 21	1	13. 3. 45.94	+ 3,171
Σ 197.....	78. 42	3	8. 59. 17.64	+ 3,260	B. XIII. 113.....	97. 14	2	13. 7. 22.55	+ 3,120
Σ 1322. <i>sp.</i>	86. 26	2	9. 1. 23.83	+ 3,129	Σ 1733. <i>np.</i>	71. 55	2	13. 8. 41.48	+ 2,942
Σ 1324. <i>sf.</i>	72. 50	1	9. 3. 57.90	+ 3,357	Σ 1742.....	87. 47	1	13. 16. 21.56	+ 3,054
Σ 1332. <i>sp.</i>	63. 11	3	9. 4. 51.78	+ 3,538	SPICA.....	100. 21	28	13. 16. 58.95	+ 3,151
Σ 3121.....	65. 42	2	9. 8. 18.73	+ 3,482	Σ 266.....	73. 29	2	13. 20. 49.66	+ 2,934
Σ 201*.....	60. 46	2	9. 8. 36.98	+ 3,579	B. XIII. 375.....	97. 3	2	13. 22. 44.76	+ 3,129
Σ 1355. <i>np.</i>	61. 26	3	9. 14. 43.04	+ 3,551	B.A.C. 4530. <i>sp.</i>	89. 31	2	13. 26. 19.31	+ 3,067
α HYDRÆ.....	83. 5	1	9. 19. 4.05	+ 3,175	Σ 1760. <i>sp.</i>	62. 55	2	13. 27. 4.67	+ 2,817
ξ Leonis.....	97. 59	21	9. 19. 55.31	+ 2,950	m Virginis.....	97. 55	1	13. 33. 25.86	+ 3,144
Σ 205†.....	78. 1	3	9. 23. 31.97	+ 3,250	Piazzi XIII. 163...	61. 9	2	13. 33. 27.02	+ 2,778
o Leonis.....	48. 19	2	9. 32. 43.58	+ 3,784	Σ 1776. <i>sp.</i>	42. 59	1	13. 35. 20.88	+ 2,491
φ Ursæ Majoris...	79. 24	3	9. 32. 49.27	+ 3,221	B. XIII. 638.....	98. 33	2	13. 36. 25.14	+ 3,153
Σ 1397. <i>np.</i>	35. 13	1	9. 41. 27.06	+ 4,148	Σ 1781. <i>sp.</i>	84. 6	2	13. 38. 17.10	+ 3,013
H. C. 19435.....	64. 12	1	9. 47. 53.17	+ 3,423	B.A.C. 4591.....	98. 55	1	13. 38. 59.22	+ 3,158
π Leonis.....	64. 17	1	9. 48. 1.42	+ 3,421	Σ 1783. <i>sp.</i>	48. 11	3	13. 39. 23.05	+ 2,568
Σ 210.....	81. 13	4	9. 51. 58.03	+ 3,181	α Virginis.....	107. 21	1	13. 41. 24.34	+ 3,249
Σ 1404. <i>np.</i>	42. 53	1	9. 52. 43.65	+ 3,830	Σ 271.....	79. 5	3	13. 46. 15.67	+ 2,955
REGULUS.....	90. 56	1	9. 56. 19.94	+ 3,059	Σ 1804. <i>sp.</i>	68. 4	1	14. 0. 58.52	+ 2,799
Σ 213. <i>np.</i>	77. 16	25	10. 0. 3.55	+ 3,221	Σ 1805. <i>sp.</i>	85. 15	1	14. 2. 6.37	+ 3,014
B.A.C. 3506.....	61. 48	3	10. 4. 18.67	+ 3,417	Σ 1808. <i>sp.</i>	62. 40	1	14. 3. 5.81	+ 2,717
Σ 1426. <i>sp.</i> *.....	71. 29	1	10. 7. 45.83	+ 3,281	κ Virginis.....	99. 33	2	14. 4. 34.96	+ 3,187
Σ 217.....	82. 47	2	10. 12. 22.24	+ 3,147	Σ 1812. <i>np.</i>	60. 33	2	14. 5. 29.66	+ 2,677
Σ 218. <i>np.</i>	71. 59	1	10. 18. 27.00	+ 3,257	ARCTURUS.....	70. 0	29	14. 8. 32.92	+ 2,734
ρ Leonis.....	85. 39	3	10. 19. 26.39	+ 3,114	Σ 1825. <i>nf.</i>	69. 9	2	14. 9. 17.68	+ 2,798
Σ 1445. <i>np.</i>	79. 54	2	10. 24. 35.63	+ 3,167	λ Virginis.....	102. 39	3	14. 10. 40.69	+ 3,232
B.A.C. 3649.....	90. 4	3	10. 24. 44.77	+ 3,070	Σ 1870. <i>nf.</i>	81. 15	1	14. 35. 15.60	+ 2,941
Σ 1465. <i>sp.</i>	80. 21	3	10. 31. 31.75	+ 3,157	ε Bootis. <i>sf.</i>	62. 16	23	14. 38. 10.50	+ 2,623
Σ 1470.....	44. 33	3	10. 34. 1.40	+ 3,568	α ² LIBRÆ.....	105. 23	12	14. 42. 15.53	+ 3,310
Σ 228.....	94. 56	3	10. 38. 20.16	+ 3,030	Σ 1898. <i>nf.</i>	30. 5	1	14. 52. 36.58	+ 1,492
40 Sextantis. <i>sf.</i> ...	66. 36	1	10. 38. 48.98	+ 3,271	β Bootis.....	48. 59	3	14. 56. 4.18	+ 2,263
Piazzi X. 179. <i>sf.</i> ...	93. 12	1	10. 41. 22.55	+ 3,045	Σ 1908.....	54. 56	1	14. 58. 39.85	+ 2,411
Σ 1496. <i>sf.</i>	81. 43	3	10. 44. 2.51	+ 3,134	Σ 1935. <i>np.</i>	58. 44	1	15. 13. 48.26	+ 2,463
d Leonis.....	75. 53	3	10. 50. 5.34	+ 3,171	Σ 1942. <i>np.</i>	67. 59	1	15. 19. 7.90	+ 2,658
Σ 1501.....	85. 33	4	10. 52. 30.23	+ 3,101	Σ 1953. <i>nf.</i>	83. 58	1	15. 25. 14.53	+ 2,960
Σ 1506. <i>nf.</i>	58. 20	1	10. 53. 44.86	+ 3,306	α CORONÆ BOREALIS.	62. 45	14	15. 28. 5.13	+ 2,528
Σ 231. <i>nf.</i>	93. 23	3	10. 56. 47.66	+ 3,049	α SERPENTIS.....	83. 5	9	15. 36. 35.32	+ 2,939
Piazzi XI. 14.....	58. 42	3	11. 2. 29.96	+ 3,272	Piazzi XV. 220. <i>sf.</i> ...	86. 8	1	15. 49. 27.06	+ 2,994
φ Leonis.....	51. 34	2	11. 6. 29.03	+ 3,316	δ Scorpii.....	112. 10	1	15. 51. 7.17	+ 3,531
Σ 1530. <i>sf.</i>	92. 48	2	11. 8. 43.92	+ 3,056	β ¹ Scorpii.....	109. 22	3	15. 56. 22.52	+ 3,474
σ Leonis.....	96. 3	2	11. 11. 50.17	+ 3,041	Σ 2007. <i>sf.</i>	76. 15	1	15. 58. 46.69	+ 2,788
Σ 1534. <i>sf.</i>	83. 7	1	11. 13. 5.56	+ 3,103	δ OPHIUCHI.....	93. 17	10	16. 6. 10.59	+ 3,138
Σ 1535. <i>sp.</i>	70. 57	3	11. 13. 38.84	+ 3,163	ANTARES.....	116. 5	13	16. 19. 51.15	+ 3,664
e Leonis.....	88. 13	1	11. 14. 54.40	+ 3,079	Σ 2104. <i>sp.</i>	53. 48	1	16. 43. 6.18	+ 2,146
Σ 234.....	92. 9	1	11. 22. 20.50	+ 3,062	η Ophiuchi.....	105. 32	1	17. 1. 26.28	+ 3,430
Σ 1558. <i>sf.</i> *.....	47. 51	1	11. 22. 22.25	+ 3,268	α HERCULIS. <i>np.</i> ...	75. 26	10	17. 7. 32.25	+ 2,732
v Leonis.....	67. 40	1	11. 28. 32.69	+ 3,146	Σ 2147. <i>np.</i>	60. 55	1	17. 11. 29.53	+ 2,343
B. XI. 687.....	89. 58	1	11. 28. 57.82	+ 3,071	Σ 2157. <i>nf.</i>	73. 23	2	17. 15. 54.16	+ 2,679
β LEONIS.....	83. 14	1	11. 38. 47.60	+ 3,085	ρ Herculis. <i>sf.</i>	52. 42	2	17. 18. 18.15	+ 2,069
β Virginis.....	74. 33	19	11. 41. 5.97	+ 3,066	c ² Ophiuchi.....	113. 50	1	17. 21. 54.22	+ 3,653
Σ 1576. <i>nf.</i>	87. 21	4	11. 42. 34.23	+ 3,075	Σ 2173.....	90. 55	2	17. 22. 22.27	+ 3,092
Σ 1581. <i>np.</i>	58. 18	1	11. 44. 47.67	+ 3,125	Piazzi XVII. 135...	87. 3	1	17. 24. 14.03	+ 3,002
Σ 3078. <i>sf.</i>	43. 35	1	11. 47. 59.61	+ 3,144	α OPHIUCHI.....	77. 19	14	17. 27. 41.77	+ 2,773
η Virginis.....	77. 50	1	12. 1. 19.03	+ 3,069	Σ 333.....	79. 19	1	17. 29. 31.23	+ 2,820
H. C. 23132.....	89. 48	5	12. 11. 55.68	+ 3,070	Σ 2198. <i>sp.</i>	63. 22	1	17. 36. 22.48	+ 2,404
q Virginis.....	64. 8	1	12. 13. 35.03	+ 3,032	Σ 2217. <i>np.</i>	75. 9	1	17. 39. 35.43	+ 2,717
Σ 1661.....	98. 35	4	12. 25. 44.05	+ 3,094	Piazzi XVII. 260...	82. 43	1	17. 43. 1.96	+ 2,900
Σ 254.....	77. 44	1	12. 28. 7.67	+ 3,035	4 Sagittarii.....	113. 48	1	17. 50. 16.17	+ 3,660
Σ 1678. <i>nf.</i>	30. 17	1	12. 36. 40.23	+ 2,706	μ ¹ SAGITTARI.	111. 6	3	18. 4. 26.14	+ 3,586
Σ 1680. <i>sf.</i>	74. 46	1	12. 37. 37.43	+ 3,011	λ Sagittarii.....	115. 30	1	18. 18. 20.71	+ 3,706
35 Comæ. <i>sp.</i> *.....	67. 22	2	12. 41. 31.51	+ 2,970	δ Ursæ Minoris....	3. 24	20	18. 22. 39.13	-19,255
ψ Virginis.....	67. 54	1	12. 45. 36.89	+ 2,964	β LYRÆ.....	56. 49	5	18. 44. 19.25	+ 2,212
	98. 41	2	12. 46. 14.74	+ 3,112	v ¹ Sagittarii.....	112. 56	1	18. 44. 45.00	+ 3,625

* The close double-star.

† This is H. C. 18992.

Name of Star.	Approximate N.P.D. Jan. 1, 1844.	Number of Obser- vations.	Mean R.A. Jan. 1, 1844.	Annual Variation.	Name of Star.	Approximate N.P.D. Jan. 1, 1844.	Number of Obser- vations.	Mean R.A. Jan. 1, 1844.	Annual Variation.
	° ' "		h. m. s.	s.		° ' "		h. m. s.	s.
Σ 2415. <i>sf.</i>	69.35	1	18.47.49,59	+ 2,584	μ Aquarii.....	99.34	3	20.44.14,12	+ 3,241
ο Sagittarii.....	111.58	2	18.55.19,99	+ 3,594	Σ 2738. <i>nf.</i>	74.10	2	20.51.16,41	+ 2,792
B.A.C. 6525.....	118.52	3	18.57.41,25	+ 3,785	θ Capricorni.....	107.51	3	20.57.10,27	+ 3,379
ζ Aquilæ.....	76.22	1	18.58.14,43	+ 2,757	* (Mag. 9, 10)....	100.50	2	21.2.18,31	+ 3,250
H. C. 35760.....	54.27	3	18.58.32,36	+ 2,146	* (Mag. 9).....	99.59	3	21.2.21,93	+ 3,235
Σ 2466. <i>np.</i>	60.26	3	19.1.48,52	+ 2,339	ζ Cygni.....	60.25	5	21.6.18,04	+ 2,549
* (Mag. 9).....	71.3	3	19.5.36,36	+ 2,630	Σ 2776*.....	101.0	3	21.6.57,90	+ 3,249
Σ 2484. <i>n.</i>	71.12	2	19.7.24,13	+ 2,635	B. XXI. 222.....	102.55	6	21.9.59,52	+ 3,278
Σ 2489. <i>sf.</i>	75.44	1	19.9.18,30	+ 2,746	ι Capricorni.....	107.30	1	21.13.33,27	+ 3,351
B.A.C. 6590.....	105.48	6	19.10.6,36	+ 3,431	β Aquarii.....	96.15	15	21.23.20,59	+ 3,163
Σ 2499. <i>sf.</i>	68.20	3	19.11.53,20	+ 2,565	ξ Aquarii.....	98.33	3	21.29.26,60	+ 3,194
ρ ¹ Sagittarii.....	108.8	1	19.12.37,39	+ 3,486	λ Capricorni.....	102.5	2	21.38.8,03	+ 3,237
ρ ² Sagittarii.....	108.35	3	19.12.44,86	+ 3,497	* (Mag. 9).....	71.29	1	21.43.38,92	+ 2,820
* (Mag. 7, 8).....	110.56	3	19.13.26,38	+ 3,556	Σ 2834. <i>sf.</i>	71.25	1	21.44.20,25	+ 2,820
Σ 2504. <i>sf.</i>	71.9	2	19.14.7,54	+ 2,638	Σ 2848. <i>sp.</i>	84.48	1	21.50.12,49	+ 3,005
Piazzi XIX. 85.....	94.1	1	19.14.21,29	+ 3,960	30 Aquarii.....	97.16	2	21.55.3,89	+ 3,160
B.A.C. 6639.....	120.3	2	19.17.4,66	+ 3,801	α Aquarii.....	91.5	17	21.57.46,20	+ 3,083
ε ¹ Sagittarii.....	106.39	3	19.31.46,99	+ 3,439	Σ 2878. <i>np.</i>	82.48	2	22.6.42,57	+ 2,990
Σ 2556.....	68.6	3	19.32.44,18	+ 2,576	Σ 2882. <i>sf.</i>	53.2	1	22.7.29,05	+ 2,596
ε ² Sagittarii.....	106.29	2	19.33.35,57	+ 3,434	Σ 2889. <i>nf.</i>	64.30	1	22.9.6,13	+ 2,774
γ Aquilæ.....	79.46	9	19.38.50,59	+ 2,851	ε Cephei.....	33.44	3	22.9.18,16	+ 2,140
Σ 2576. <i>np.</i>	56.45	2	19.39.38,02	+ 2,275	γ Aquarii.....	92.10	2	22.13.35,81	+ 3,093
57 Sagittarii.....	109.26	1	19.43.7,77	+ 3,496	Σ 2902. <i>p.</i>	45.26	3	22.17.2,02	+ 2,498
α Aquilæ.....	81.32	35	19.43.10,30	+ 2,925	B. XXII. 425.....	75.40	3	22.19.30,17	+ 2,925
β Aquilæ.....	83.59	15	19.47.39,02	+ 2,945	Σ 2905. <i>np.</i>	75.38	3	22.19.34,72	+ 2,925
* (Mag. 9).....	57.8	3	19.52.19,04	+ 2,308	Σ 2916†.....	49.35	3	22.24.29,83	+ 2,610
Σ 2606.....	57.9	2	19.52.51,65	+ 2,309	η Aquarii.....	90.55	3	22.27.20,35	+ 3,079
Σ 2607. <i>sf.</i>	48.9	1	19.52.41,69	+ 2,015	κ Aquarii.....	95.2	2	22.29.40,58	+ 3,115
16 Vulpeculæ.....	65.30	1	19.55.24,52	+ 2,537	ζ Pegasi.....	79.59	1	22.33.41,00	+ 2,984
Σ 2626.....	59.54	4	19.58.1,20	+ 2,396	* (Mag. 9, 10)....	24.16	3	22.36.2,46	+ 2,008
Σ 2627. <i>sp.</i>	85.40	1	19.59.57,33	+ 2,983	τ ¹ Aquarii. <i>np.</i>	104.53	3	22.39.25,51	+ 3,193
Σ 2643. <i>sp.</i>	93.27	4	20.4.38,07	+ 3,139	3 Piscium.....	90.39	1	22.52.37,86	+ 3,075
α ² Capricorni.....	103.1	13	20.9.23,74	+ 3,332	β Piscium.....	87.1	2	22.55.56,25	+ 3,051
Σ 2658*.....	37.21	4	20.9.32,17	+ 1,591	β Pegasi.....	62.46	2	22.56.13,24	+ 2,881
Σ 2671. <i>sf.</i>	35.5	3	20.14.33,70	+ 1,485	α Pegasi.....	75.38	21	22.56.59,68	+ 2,978
Σ 2681†.....	37.5	2	20.18.37,77	+ 1,616	γ Piscium.....	87.34	2	23.9.4,65	+ 3,058
ρ Capricorni.....	108.19	2	20.19.57,30	+ 3,434	κ Piscium.....	89.36	4	23.18.56,12	+ 3,069
B.A.C. 7049.....	112.54	2	20.20.21,75	+ 3,533	ι Piscium.....	85.13	3	23.31.55,64	+ 3,057
B.A.C. 7079. <i>sp.</i>	79.16	1	20.23.44,96	+ 2,865	ω Piscium.....	84.0	2	23.51.18,19	+ 3,065
υ Capricorni.....	108.41	1	20.31.9,80	+ 3,428	* (Mag. 10).....	26.11	1	23.56.10,70	+ 3,025
ε Aquarii.....	100.4	4	20.39.13,65	+ 3,253	Σ 3057. <i>sf.</i>	32.20	2	23.56.54,42	+ 3,041
4 Aquarii. <i>sp.</i>	96.12	1	20.43.9,28	+ 3,181	33 Piscium.....	96.35	2	23.57.20,95	+ 3,072
5 Aquarii.....	96.5	2	20.43.53,45	+ 3,179	Σ 3062.....	32.26	2	23.58.8,33	+ 3,054

* The brightest of a triple star.

† The brightest of a quadruple star.

‡ The *sp.* of the two close stars.

APPARENT NORTH POLAR DISTANCES

OBSERVED WITH THE

MURAL CIRCLE,

IN THE YEAR 1844.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle Reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					"	"		
Jan. 1	(a) α Andromedæ R...	2.51,0	48,1	47,9	43,0	46,1	48,1	3,759		111. 5. 1,08	29,468	39,7	35,5	61.46. 4,22	B.
	α Andromedæ.....	1.61,2	54,0	59,4	50,1	52,7	56,7		+2	339. 1.56,27				61.46. 0,19	B.
	α Cassiopeiæ R....	1.29,9	26,9	28,1	22,0	25,1	27,7	9,000		138.31.50,91	29,472	39,7	35,4	34.18.44,47	B.
	α Cassiopeiæ.....	0.16,1	11,5	14,9	6,0	11,0	11,2		+1 $\frac{1}{2}$	311.35.12,49				34.18.46,49	B.
	(a) Polaris R.....	3.29,9	26,6	30,0	21,1	26,7	28,1	8,423		171.19. 3,55		39,3	36,5	1.30.52,10	B.
	Polaris.....	2.65,9	60,0	64,1	54,1	58,6	59,5			278.48. 1,19				1.30.55,46	B.
	(b) 27 Arietis.....	4.57,8	50,9	57,9	46,9	53,0	51,4			350.14.52,98	29,486	39,1	35,6	72.59.12,32	B.
	(b) μ Arietis.....	4.63,9	57,0	63,9	51,8	58,7	58,2			347.54.58,92				70.39.14,75	B.
	γ Arietis.....	0.45,3	37,6	46,4	34,0	40,0	39,9			343. 5.40,63	29,480	38,3	33,9	65.49.49,86	B.
	) S.L.....	1.11,9	4,0	10,9	0,4	5,9	4,9	14,150	-2	346.14.40,25		37,8	33,6	68.58.53,83	B.
	) S.L.....	...	...	...	...	...	...	14,199	-1	346.14.40,61				68.58.54,19	B.
	) S.L.....	...	...	...	...	...	...	14,299		346.14.40,16				68.58.53,74	B.
	) S.L.....	...	...	...	...	...	...	14,347	+1	346.14.40,87				68.58.54,45	B.
	) S.L.....	...	...	...	...	...	...	14,470	+2	346.14.40,08				68.58.53,66	B.
	A ¹ Tauri.....	1.43,0	36,0	43,7	32,9	39,1	39,8			345.36.39,32				68.20.52,00	B.
	ω Tauri.....	4.24,9	15,9	23,9	12,0	17,9	19,8			347. 4.19,67				69.48.34,47	B.
	(c) B.A.C. 1661.....	0.33,1	27,2	33,6	23,1	29,1	29,0			3.50.29,25	29,476	35,9	32,6	86.35.14,77	B.
Jan. 5	ζ Geminorum.....	2.54,1	56,9	52,1	56,0	57,9	57,9			53.17.55,62	29,280	50,3	50,5	69.12.27,96	B.
	(d)) N.L.....	4.15,8	15,8	13,2	15,1	17,6	18,0	10,320	+2	54.19. 9,94	29,274	50,2	50,0	70.13.42,72	B.
	γ Geminorum.....	2.25,0	25,1	20,9	24,2	27,1	26,5			55.12.24,63	29,258	50,1	49,6	71. 6.58,67	B.
	ζ Cancr. np.....	3.45,1	45,7	41,8	43,7	47,2	47,5			55.58.44,92	29,250	50,2		71.53.20,06	B.
Jan. 6	(e)) S.L.....	3.28,2	27,5	26,0	27,1	29,2	29,8			96.53.27,73	29,124	48,2	48,8	112.50.53,41	B.
	) N.L.....	1. 4,4	4,9	2,0	4,6	4,9	4,9			96.21. 4,22				112.18.22,49	B.
	Mercury, centre..	2.48,0	47,0	46,8	46,9	49,2	48,9			95.22.47,62	29,120	49,5	48,9	111.19.53,38	B.
	(f) Polaris R.....	3.38,7	39,0	35,2	38,0	40,0	41,8	9,950		238. 8.43,49	29,162	44,9	41,9	1.30.54,17	B.
	Polaris.....	2.39,1	37,0	37,1	38,1	41,1	41,0			345.37.39,77				1.30.53,91	B.
Jan. 7	δ Cancr.....	2. 9,9	10,5	8,2	8,8	9,5	12,2			55.22. 9,70	29,636	42,9	36,1	71.16.45,54	B.
	α Cancr.....	2.55,1	55,9	54,9	53,0	56,4	57,7			61.37.55,30				77.32.41,24	B.
	) S.L.....	1.55,8	57,3	55,4	54,9	57,1	58,1	10,122	-2	62.42. 4,57				78.36.52,39	B.
	) S.L.....	...	...	...	...	...	...	10,060	-1	62.42. 2,59				78.36.50,41	B.
	) S.L.....	...	...	...	...	...	...	9,880		62.42. 3,28				78.36.51,10	B.
	) S.L.....	...	...	...	...	...	...	9,769	+1	62.42. 2,57				78.36.50,33	B.
	) S.L.....	...	...	...	...	...	...	9,531	+2	62.42. 4,51				78.36.52,07	B.
	ξ Leonis.....	1. 9,1	12,9	9,0	10,1	10,9	12,0			62. 6.10,58				78. 0.57,33	B.
	σ Leonis.....	4.24,3	28,0	24,3	23,9	25,9	27,9			63.29.25,42	29,646	42,4	36,4	79.24.14,69	B.
Jan. 10	) S.L.....	2.24,0	24,0	21,9	22,5	22,4	26,5	11,260		96.22. 1,61	30,184	41,1	42,0	112.19.30,43	B.
	) N.L.....	4.33,1	34,9	31,2	30,1	33,0	35,7			95.49.32,70				111.46.55,19	B.
	(b) Venus S.L.....	4.59,9	61,0	59,5	61,2	60,4	61,0			92.20. 0,50	30,202	42,7	44,6	108.16.43,14	B.
	Venus N.L.....	...	...	...	...	...	...	10,811		92.19.48,07				108.16.30,71	B.
	ζ Geminorum R...	3. 9,0	10,9	9,8	9,9	11,0	12,8	9,339		170.28.28,61	30,250	43,0	42,8	69.12.27,97	B.
	ζ Geminorum.....	2.54,9	56,9	54,2	54,6	56,8	56,1		+1 $\frac{1}{4}$	53.17.55,47				69.12.28,53	B.
	Castor R.....	4.11,9	15,1	12,9	14,1	13,3	16,8	10,470		181.54. 8,42				57.46.33,39	B.
	(g) Castor.....	2.19,0	20,9	18,2	18,9	19,9	20,1			41.52.19,35				57.46.37,64	B.
	(g) Pollux R.....	4. 4,0	6,9	5,1	6,7	6,2	8,0	9,040		178. 4.30,36				61.36.16,09	B.
	(g) Pollux.....	1.52,2	55,1	51,8	51,1	52,6	54,3		+1 $\frac{1}{4}$	45.41.52,85				61.36.15,78	B.
	β Cancr R.....	0.39,1	41,6	40,0	42,1	41,8	42,5	9,822		159.20.49,32	30,260	42,5	41,7	80.20.25,74	B.
	β Cancr.....	0.34,1	36,7	33,9	36,1	36,0	37,1			64.25.35,62				80.20.27,16	B.
Jan. 11	) S.L.....	2.55,0	57,0	53,9	53,1	55,0	56,1	9,561		96.13. 8,44	30,280	43,7	45,4	112.10.34,38	B.
	α Cygni R.....	3.30,7	33,0	30,9	30,2	32,1	34,9	8,449		194.24. 8,54	30,276	45,0	46,5	45.16.19,31	B.
	α Cygni.....	2.12,8	15,0	12,8	9,8	14,1	13,9		+1 $\frac{1}{4}$	29.22.13,15				45.16.17,48	B.
	Mercury, centre..	4.52,9	53,6	50,9	51,1	52,1	52,6			92.59.51,87				108.56.40,44	B.
	Venus N.L.....	3. 5,0	7,9	3,9	5,1	5,9	6,6			91.58. 5,53	30,278	45,4	47,0	107.54.44,53	B.
	Venus S.L.....	...	...	...	...	...	...	9,780		91.58.15,64				107.54.54,64	B.
Jan. 13	(h)) S.L.....	3.59,5	58,9	60,1	60,6	59,0	62,0		+3	95.53.59,59	29,968	41,2	41,0	111.51.21,02	B.
	(i) Mercury, centre..	4.57,6	57,0	57,0	57,0	57,0	59,9			91.59.57,25	29,960	42,0	42,4	107.56.36,36	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10',134, 10',142, 10',156, 10',169, 10',179 at the five wires. From Jan. 5 = 10',193, 10',201, 10',215, 10',228, 10',238. (See Introduction). ONE REVOLUTION = 20'',838. CORRECTION for RUNS = +4'',2. From Jan. 5 = -2'',0. ZENITH POINT = 315°.3'.30'',69. From Jan. 5 = 21°.53'.11'',76. ASSUMED CO-LATITUDE = 37°.47'.8'',28.

(a) Too much wind. (b) No correction for Runs. (c) On Jan. 2 the Circle was taken from the Pier to clean its axis, the Telescope was shifted on the Limb, and the Microscopes were adjusted. The fixed wire was adjusted equatorially on Jan. 5. (d) Rain falling. (e) Accidentally on the fixed wire. (f) The mercury was agitated. (g) Very much hurried. (h) Without the dark glass: not good. (i) Faint and taken hurriedly.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	"	"		
Jan. 13	(a) Venus N.L.....	3. 5,0	5,0	4,9	5,9	5,4	7,9	9,760	-1	91. 13. 5,17	29,956	42,6	40,5	107. 9. 38,30	B.
	Venus S.L.....	...	...	...	...	...	...		-1	91. 13. 14,36				107. 9. 47,49	B.
Jan. 14	(b) S.L.....	3. 9,4	10,9	12,3	9,9	11,3	13,8	8,711	+1	96. 53. 42,04	30,308	34,3	25,5	112. 51. 27,24	B.
	S.L.M.....	...	...	...	...	...	...	9,039	+2	96. 53. 33,54				112. 51. 19,22	B.
Jan. 15	(c) N.L.....	4. 46,9	44,5	47,2	44,1	44,0	48,7	21,929		95. 0. 42,88	30,312	35,0	32,9	110. 57. 58,83	B.
	S.L.....	3. 11,5	10,0	10,3	7,9	9,9	12,7			95. 33. 10,73				111. 30. 33,50	B.
	α Cygni R.....	3. 26,4	26,2	26,6	24,0	27,0	30,0	8,219		194. 24. 9,25	30,244	36,2	34,5	45. 16. 18,79	B.
	α Cygni.....	2. 14,7	14,9	14,8	12,0	13,7	17,9			29. 22. 14,92				45. 16. 19,44	B.
	Mercury, centre..	1. 38,8	38,8	38,8	37,0	38,2	41,0			91. 1. 38,95	30,290	36,3	34,6	106. 58. 14,24	B.
	Venus N.L.....	1. 13,9	12,6	12,8	11,2	9,7	14,9			90. 26. 13,05				106. 22. 43,62	B.
	Venus S.L.....	...	...	...	...	...	...	9,830	+4½	90. 26. 22,35				106. 22. 52,92	B.
	B.A.C. 632.....	0. 9,3	9,4	9,0	7,0	7,6	11,2			56. 35. 8,93	30,300	34,7	30,4	72. 29. 48,00	B.
	B.A.C. 650.....	3. 11,2	10,5	11,0	7,1	8,6	14,0			56. 48. 10,75				72. 42. 50,16	B.
	θ Arietis.....	4. 39,0	37,9	39,1	36,2	38,9	41,1			54. 54. 39,20				70. 49. 15,70	B.
	27 Arietis.....	4. 35,5	31,2	33,9	29,0	32,0	36,9			57. 4. 33,58				72. 59. 13,47	B.
	μ Persei R.....	0. 28,1	27,9	25,8	27,7	25,2	31,0	8,661		197. 41. 0,64	30,296	33,6	29,4	41. 59. 23,93	B.
	μ Persei.....	0. 21,9	23,9	22,9	21,8	21,5	24,0			26. 5. 22,70				41. 59. 23,75	B.
	(f) Rigel R.....	2. 10,6	9,9	9,0	8,1	8,9	12,1	5,211		141. 18. 54,86		33,3	28,7	98. 23. 14,26	B.
	Rigel.....	2. 31,9	31,0	31,9	29,0	30,8	34,9		+1	82. 27. 31,83				98. 23. 17,43	B.
	B.A.C. 1661.....	0. 6,8	7,0	7,9	6,1	5,1	8,0			70. 40. 6,83				86. 35. 13,74	B.
	m Orionis.....	...	...	...	...	...	...	6,030		70. 41. 34,62				86. 36. 41,59	B.
	A Orionis. sp....	0. 36,1	35,1	36,1	33,0	35,1	38,4			68. 15. 35,70				84. 10. 36,92	B.
Jan. 16	» S.L.....	2. 28,2	31,1	28,1	27,0	28,5	32,0	11,070		95. 22. 12,18	30,192	34,8	31,7	111. 19. 32,31	B.
	» N.L.....	4. 42,9	43,8	43,9	42,9	42,9	45,9			94. 49. 44,23				110. 46. 57,68	B.
	101 Piscium.....	3. 24,5	23,0	22,5	21,4	22,0	27,0			60. 13. 23,77	30,136	34,9	32,5	76. 8. 8,44	B.
Jan. 17	Venus N.L.....	2. 33,9	34,2	32,9	33,9	35,1	36,3			89. 37. 34,52	30,116	39,8	42,4	105. 33. 55,76	B.
	Venus S.L.....	...	...	...	...	...	...	9,812		89. 37. 43,51				105. 34. 4,75	B.
Jan. 18	(g) S.L.....	4. 25,9	25,5	25,3	25,1	27,1	28,2	11,401		94. 59. 2,27	30,108	40,7	44,0	110. 56. 11,97	B.
	N.L.....	1. 36,0	36,2	34,9	37,8	36,3	38,0			94. 26. 36,62				110. 23. 35,54	B.
	α Cygni R.....	4. 16,9	19,2	16,0	16,9	17,0	21,2	10,779		194. 24. 6,90	30,048	41,6	44,5	45. 16. 20,93	B.
	α Cygni.....	2. 15,1	13,1	13,8	12,8	16,9	16,8			29. 22. 14,87				45. 16. 19,18	B.
	Venus N.L.....	2. 35,1	36,9	34,0	36,1	38,1	38,5		+4½	89. 12. 37,14	30,068	42,2	45,0	105. 8. 54,48	B.
	Venus S.L.....	...	...	...	...	...	...	9,760		89. 12. 47,90				105. 9. 5,24	B.
Jan. 19	27 Arietis.....	4. 35,7	34,9	32,0	32,1	35,1	37,1			57. 4. 34,72	29,828	42,3	42,4	72. 59. 12,87	B.
	(i) B.A.C. 845.....	2. 56,2	57,9	55,0	54,9	57,2	58,2			64. 37. 56,72				80. 32. 47,79	B.
	(k) α Persei R.....	3. 35,0	36,9	33,1	34,0	37,1	38,0	9,925		198. 58. 42,50	29,840	42,2	41,8	40. 41. 40,55	B.
	α Persei.....	2. 41,9	41,6	41,0	39,3	42,0	43,8		+1	24. 47. 41,90				40. 41. 41,43	B.
	(k) Aldebaran R....	1. 27,0	28,9	27,2	27,4	29,9	30,9	7,239		165. 52. 31,21	29,846	41,7	40,6	73. 48. 31,93	B.
	Aldebaran.....	3. 51,9	51,1	50,5	49,2	51,9	53,2		+1	57. 53. 51,52				73. 48. 31,14	B.
	η Aurigæ R.....	1. 26,1	26,1	24,5	26,1	25,9	28,1	9,670		190. 41. 38,14	29,850	41,2		48. 58. 53,64	B.
	η Aurigæ.....	4. 44,1	45,3	42,0	42,5	44,9	47,0			33. 4. 44,55				48. 58. 52,81	B.
	B.A.C. 1661.....	0. 9,5	10,9	7,5	10,2	9,9	12,0			70. 40. 10,02				86. 35. 14,18	B.
	m Orionis. sp....	...	...	...	...	...	...	6,010		70. 41. 38,23				86. 36. 42,45	B.
	(l) A Orionis.....	0. 39,2	40,2	36,1	38,9	39,1	41,7			68. 15. 39,23	29,856		40,4	84. 10. 37,97	B.
	(m) ζ Geminorum R..	3. 45,2	48,1	46,1	47,1	47,3	49,7	11,238		170. 28. 26,70	29,854	41,0	40,9	69. 12. 29,55	B.
	ζ Geminorum.....	2. 54,1	56,1	52,1	53,5	55,1	56,9		+1	53. 17. 54,83				69. 12. 27,56	B.
	(n) Pollux R.....	4. 18,9	20,8	17,2	18,0	19,8	22,8	9,800		178. 4. 29,03	29,850	41,1	40,5	61. 36. 17,20	B.
	Pollux.....	1. 51,9	54,8	50,2	50,0	51,9	54,0		+3	45. 41. 52,96				61. 36. 15,67	B.
Jan. 20	(o) S.L.....	4. 13,3	13,1	13,7	14,1	12,1	15,8			94. 34. 13,90	29,940	39,1	38,5	110. 31. 19,93	G.
	N.L.....	1. 49,0	48,9	49,6	49,8	48,2	49,8			94. 1. 49,32				109. 58. 49,39	G.
	(p) α Cygni R.....	4. 22,9	23,1	22,9	21,4	22,8	25,6	11,058		194. 24. 6,35			38,7	45. 16. 21,54	G.
	α Cygni.....	2. 16,4	15,8	16,0	13,9	16,7	17,9			29. 22. 16,23				45. 16. 20,60	G.
	Mercury, centre..	3. 17,8	19,0	17,4	16,4	17,8	19,3		+3	89. 3. 18,40				104. 59. 35,94	G.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10",193, 10",201, 10",215, 10",228, 10",238 at the five wires.
 From Jan. 14 = 10",221, 10",229, 10",243, 10",256, 10",266. ONE REVOLUTION = 20",838. CORRECTION for RUNS = -2",0.
 From Jan. 14 = +3",3. From Jan. 17 = +1",5. ZENITH POINT = 21°. 53'. 11",76. ASSUMED CO-LATITUDE = 37°. 47'. 8",28.

(a) Extremely faint from clouds. (b) Very uneven limb, and observed hurriedly: the next observation better. (c) The micrometer-reading has been diminished 1". (d) The shutters were in the way, being out of order. (e) The micrometer-reading has been increased 1". (f) Indefinite.
 (g) Clouds passing. (h) Much hurried. (i) Rather cloudy. (k) Mercury agitated by the wind. (l) Barometer reading was set down 29,806.
 (m) Faint from clouds. (n) Doubtful bisection: wind too high. (o) Accidentally on the fixed wire, and well bisected. (p) Good.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Jan. 20	Venus S.L.	1.38,1	38,8	37,1	38,0	38,4	39,6	10,881	+2	88.21.38,89	29,940	40,0	39,5	104.17.51,61	G.
	Venus N.L. ....	...	...	...	...	...	...			88.21.26,08				104.17.38,80	G.
	μ Arietis.	4.40,1	39,9	37,9	37,2	39,4	41,1	9,267		54.44.39,50	29,976	37,9	34,5	70.39.14,99	B.
	α Persei R.	3.25,8	26,0	22,9	25,0	23,9	28,0			198.58.45,77	29,978	37,3	35,6	40.41.37,33	B.
	(a) α Persei.	2.40,9	38,9	39,9	37,9	39,2	41,7	9,288	+2	24.47.40,58				40.41.40,16	B.
	μ Persei R.	0.40,9	43,0	37,9	40,9	40,6	42,1			197.41.0,82	29,984	37,7	34,3	41.59.23,66	B.
	μ Persei.	0.23,4	22,9	21,9	20,2	22,9	24,1	7,445		26.5.22,58				41.59.23,54	B.
	(b) Aldebaran R.	1.30,6	31,0	30,2	31,0	31,8	32,9			165.52.29,65			34,2	73.48.34,27	B.
	Aldebaran.	3.51,1	51,4	51,0	49,2	51,0	53,7	5,999	+1	57.53.51,46				73.48.31,86	B.
	(c) B.A.C. 1661.	0.8,0	9,8	7,7	8,5	8,1	11,1			70.40.8,87	29,970	37,0		86.35.14,22	B.
Jan. 22	m Orionis. sp. ....	...	...	...	...	...	...	10,883	+2½	70.41.37,30				86.36.42,71	B.
	A Orionis.	0.37,0	37,9	35,0	35,8	37,2	39,2			68.15.37,05				84.10.36,84	B.
	θ Arietis.	4.39,1	39,2	38,0	37,8	39,2	41,4	9,731	+2	54.54.39,35	29,846	39,6	35,4	70.49.14,84	B.
	27 Arietis.	4.35,3	33,1	31,9	31,2	34,1	37,0			57.4.34,00				72.59.12,79	B.
	H. C. 4925.	1.61,1	60,2	59,7	58,9	60,1	61,8	9,932	+1	58.2.0,40				73.56.40,71	B.
	B.A.C. 845.	2.56,4	57,1	55,2	55,1	56,0	58,9			64.37.56,70	29,852	38,8	35,1	80.32.48,60	B.
	(d) α Persei R.	3.30,1	31,0	28,9	30,0	30,2	33,0	10,883	+2½	198.58.41,39	29,852	38,8	35,1	40.41.41,70	B.
	α Persei.	2.42,1	42,8	41,8	40,4	42,5	43,0			24.47.42,40				40.41.41,97	B.
	τ ⁶ Eridani.	2.14,0	15,0	13,6	14,0	14,0	15,9	9,932	+4½	96.12.14,15	29,856	38,6		112.9.41,95	B.
	γ Eridani R.	0.20,0	21,2	17,0	19,9	20,0	22,6			135.45.6,80				103.57.28,15	B.
Jan. 24	γ Eridani.	1.17,1	16,1	16,0	15,2	15,9	17,9	10,681	-2	88.1.16,43				103.57.27,86	B.
	(e) α Camelopardi R.	4.18,1	20,0	16,9	17,9	18,1	21,0			215.44.25,36	29,858	38,1	35,0	23.55.39,87	B.
	α Camelopardi.	1.59,9	59,0	59,3	59,0	59,3	61,0	2,782	-1	8.1.59,68				23.55.41,39	B.
	(f) m Orionis. sp.	1.38,8	39,9	39,0	38,9	38,9	41,8			70.41.39,81	29,866	37,8	34,9	86.36.44,88	B.
	A Orionis.	0.37,6	38,0	36,8	36,2	37,2	39,8	2,995	+1	68.15.37,63				84.10.37,11	B.
	Venus S.L.	4.52,1	53,1	51,9	53,0	53,5	53,9			86.34.53,17	30,130	42,4	43,6	102.30.54,93	B.
	Venus N.L. ....	...	...	...	...	...	...	3,159	+2	86.34.44,03				102.30.45,79	B.
	) S.L.	0.11,9	14,0	11,9	13,1	12,1	13,8			69.22.41,25	30,138	42,5	42,0	85.17.42,85	B.
	) S.L. ....	...	...	...	...	...	...	3,330	+1	69.22.40,25				85.17.41,85	B.
	) S.L. ....	...	...	...	...	...	...			69.22.40,44				85.17.42,04	B.
Jan. 25	) S.L. ....	...	...	...	...	...	...	3,490	+2	69.22.40,49				85.17.42,09	B.
	) S.L. ....	...	...	...	...	...	...			69.22.40,75				85.17.42,35	B.
	31 Cassiopeia.	4.9,7	10,1	10,4	6,9	11,0	11,1	10,201	-2	6.9.10,08	30,148	40,9	36,6	22.2.49,58	B.
	(g) α Piscium.	4.19,7	19,9	20,0	17,9	16,1	21,0			72.4.19,32				87.59.28,22	B.
	(h) Pollux R.	4.25,8	27,9	25,9	25,0	27,8	28,9	14,141	+3	178.4.27,97	30,180	39,1	37,0	61.36.18,74	B.
	Pollux.	1.51,8	53,0	51,1	48,4	51,8	53,1			45.41.51,63				61.36.14,82	B.
	h Ursæ Majoris R.	0.33,4	35,1	31,0	33,0	35,0	36,0	13,307	-1	213.24.12,72	30,188	38,8	35,6	26.15.54,96	B.
	h Ursæ Majoris.	2.10,3	10,7	10,2	8,7	9,8	11,1			10.22.10,25				26.15.54,41	B.
	☉ N.L.	4.25,0	26,8	24,0	26,0	24,1	27,9	12,680	+1½	92.53.22,01	30,136	40,3	43,0	108.50.10,01	B.
	☉ S.L.	0.49,9	51,0	47,1	49,1	47,8	48,4			93.25.48,92				109.22.42,22	B.
Jan. 26	(i) ☉ S.L.	1.55,6	55,2	54,0	56,0	54,5	55,0	11,664	+3	93.11.4,92	30,174	41,2	42,9	109.7.56,03	B.
	☉ N.L.	3.37,8	38,9	35,6	37,1	37,9	38,7			92.38.37,95				108.35.23,88	B.
	α Cephei R.	1.24,1	24,1	21,8	21,1	25,9	25,1	12,569	-2	211.35.54,17	30,164	43,2	44,9	28.4.15,70	B.
	α Cephei.	0.30,6	28,9	27,3	28,0	29,8	30,9			12.10.29,28				28.4.15,63	B.
	ε Piscium.	1.60,0	61,0	59,2	60,9	60,9	61,0	12,720	-1	67.2.0,60	30,176	43,1	42,6	82.56.57,10	B.
	η Piscium.	2.45,8	45,0	43,1	43,9	46,0	47,0			59.32.45,27				75.27.27,86	B.
	) S.L.	3.34,1	34,9	33,1	32,8	34,1	33,1	12,887	+1	60.27.39,57	30,182	42,9	41,4	76.22.23,83	B.
	) S.L. ....	...	...	...	...	...	...			60.27.39,26				76.22.23,52	B.
	) S.L. ....	...	...	...	...	...	...	12,988	+2	60.27.38,82				76.22.23,08	B.
	) S.L. ....	...	...	...	...	...	...			60.27.39,72				76.22.23,98	B.
Jan. 26	(a) β Arietis.	2.39,8	40,9	38,9	38,1	40,9	41,1	7,170	+1½	60.27.38,57				76.22.22,83	B.
	α Piscium. sf.	4.21,1	22,1	19,5	20,1	21,8	21,9			54.2.40,57				69.57.14,73	B.
	θ Arietis.	4.38,9	39,1	37,1	37,0	40,9	40,0	13,190	+3	72.4.21,10				87.59.29,36	B.
	Aldebaran R.	1.26,1	27,1	25,7	25,9	28,0	28,1			54.54.39,07				70.49.14,51	B.
	Aldebaran.	3.51,9	51,4	50,9	48,1	50,9	53,0			165.52.30,95	30,206	41,7	40,4	73.48.32,72	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10',221, 10',229, 10',243, 10',256, 10',266 at the five wires.
 From Jan. 26 = 10',218, 10',229, 10',245, 10',257, 10',267. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = + 1'',5.
 ZENITH POINT = 21°.53'.11'',76. ASSUMED CO-LATITUDE = 37°.47'.8'',28.

(a) Hurried. (b) The micrometer-reading was 4,445. (c) Very faint. (d) Mercury agitated. (e) Faint from clouds. The micrometer-reading was 10,932. (f) Cloudy. (g) Observed as single. (h) Indefinite and too close to fixed wire: doubtful bisection. (i) Late on account of failure of the screw.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Jan. 26	ε Aurigæ R.....	0. 27,1	28,1	24,1	26,0	26,6	29,0	9,323		193. 15. 46,04	30,206	41,7	40,4	46. 24. 43,09	B.
	ε Aurigæ.....	0. 37,9	37,1	35,8	36,0	37,2	38,1			30. 30. 37,05				46. 24. 42,66	B.
	Rigel R.....	2. 31,6	31,4	29,0	29,0	31,1	32,9	6,519		141. 18. 48,62	30,158		40,9	98. 23. 17,25	B.
	Rigel.....	2. 35,2	35,0	34,0	33,9	34,9	36,0			82. 27. 34,97				98. 23. 17,32	B.
	B.A.C. 1661.....	0. 9,8	11,1	9,0	10,1	10,1	11,8			70. 40. 10,33				86. 35. 15,15	B.
	m Orionis. sp. ....	...	...	...	...	...	...	6,026		70. 41. 38,25				86. 36. 43,12	B.
	A Orionis.....	0. 37,1	37,8	35,0	35,9	38,0	38,9			68. 15. 37,15				84. 10. 36,45	B.
	ω Geminorum.....	4. 40,1	40,0	38,0	37,9	39,1	42,0			49. 39. 39,75	30,206	41,7	40,4	65. 34. 7,90	B.
	(a) δ Geminorum R. .	1. 15,2	17,0	15,3	17,0	16,8	17,9	9,166		171. 56. 39,09				67. 44. 15,54	B.
	δ Geminorum.....	4. 43,3	44,8	43,1	42,1	45,2	47,0		+1½	51. 49. 44,62				67. 44. 15,73	B.
	23 Lyncis R.....	1. 33,1	34,9	31,2	32,2	34,9	34,3	11,718		207. 6. 2,82		41,2	40,6	32. 34. 11,74	B.
	(b) 23 Lyncis.....	0. 50,0	51,1	49,1	50,0	50,9	51,5	11,718	+1	16. 40. 20,00				32. 34. 11,04	B.
Jan. 27	β Arietis.....	2. 39,6	46,0	38,2	40,9	40,9	42,4		+2	54. 2. 41,69	30,098	43,4	45,4	69. 57. 15,44	G.
	(c) δ S.L.....	3. 53,9	56,0	51,9	51,2	54,4	55,0	12,600	-2	56. 52. 59,95				72. 47. 37,94	B.
	δ S.L.....	...	...	...	...	...	...	12,760	-1	56. 52. 58,96				72. 47. 36,95	B.
	δ S.L.....	...	...	...	...	...	...	12,830		56. 53. 0,06				72. 47. 38,05	B.
	δ S.L.....	...	...	...	...	...	...	12,929	+1	56. 53. 0,57				72. 47. 38,56	B.
	δ S.L.....	...	...	...	...	...	...	13,120	+2	56. 52. 59,22				72. 47. 37,21	B.
	α Lyræ R.....	3. 26,1	23,8	23,6	25,0	25,5	27,0	8,640		188. 18. 58,77	29,910	41,2	41,4	51. 21. 35,60	B.
	α Lyræ.....	2. 21,4	26,0	22,8	22,1	24,1	26,1		+1¼	35. 27. 24,05				51. 21. 34,90	B.
Jan. 30	⊙ S.L.....	4. 34,2	36,1	33,1	33,9	35,1	35,9	12,878		92. 8. 40,08	29,738	46,0	46,9	108. 5. 17,74	B.
	⊙ N.L.....	1. 15,4	16,8	13,1	14,9	15,1	15,2			91. 36. 15,15				107. 32. 48,23	B.
	(b) α Andromedæ R. .	4. 28,2	28,0	27,1	28,8	29,4	32,0	9,701		177. 54. 40,48	29,718	46,9	46,8	61. 46. 5,49	B.
	α Andromedæ.....	1. 39,1	41,2	37,1	38,0	40,2	41,0		+1¾	45. 51. 39,76				61. 46. 2,21	B.
	α Cassiopeiæ R. .	1. 32,9	33,0	28,9	32,8	33,0	34,6	10,470		205. 21. 27,93				34. 18. 48,57	B.
	α Cassiopeiæ.....	4. 54,0	56,0	55,0	52,9	56,0	55,9			18. 24. 55,22				34. 18. 48,20	B.
	μ Cassiopeiæ.....	1. 34,8	36,0	32,9	33,9	35,9	35,0			19. 56. 34,83				35. 50. 29,37	B.
Jan. 31	ζ Tauri.....	2. 59,4	59,1	58,9	56,1	57,9	58,9			53. 2. 58,82	29,700	35,9	33,8	68. 57. 31,54	B.
	(d) δ S.L.....	4. 41,0	38,9	40,2	35,2	37,2	40,6	11,214	-2	51. 59. 20,65	29,720	35,1	32,9	67. 53. 51,98	B.
	(d) δ S.L.....	...	...	...	...	...	...	11,189	-1	51. 59. 20,39				67. 53. 51,72	B.
	(d) δ S.L.....	...	...	...	...	...	...	11,149		51. 59. 20,69				67. 53. 52,02	B.
	δ S.L.....	...	...	...	...	...	...	11,082	+1	51. 59. 21,57				67. 53. 52,90	B.
	δ S.L.....	...	...	...	...	...	...	11,148	+2	51. 59. 19,77				67. 53. 51,10	B.
	(e) β Canis Majoris R.	3. 21,1	23,1	23,1	20,1	21,1	24,6	5,760		131. 49. 56,13	29,708	35,1	32,3	107. 53. 8,10	B.
	β Canis Majoris...	1. 29,4	28,9	28,1	26,9	26,9	29,1		+1¾	91. 56. 28,42				107. 53. 9,13	B.
	ε Geminorum.....	3. 50,1	49,0	51,0	46,1	49,0	50,8			48. 48. 49,88				64. 43. 16,92	B.
	23 Lyncis R.....	1. 20,0	26,1	23,0	21,0	23,0	24,1	11,171		207. 6. 3,77	29,720	33,9	30,6	32. 34. 10,76	B.
	23 Lyncis.....	0. 22,9	22,9	22,1	20,0	21,0	23,2			16. 40. 22,07				32. 34. 13,08	B.
	ο Ursæ Majoris R.	4. 29,6	30,2	30,1	27,1	29,1	31,9	11,760		210. 53. 58,75	29,732	33,2	30,5	28. 46. 11,71	B.
	ο Ursæ Majoris...	2. 24,0	25,1	25,1	21,2	22,9	24,9			12. 52. 24,22				28. 46. 11,16	B.
	(f) π Leonis R.....	3. 25,7	26,8	25,9	24,1	23,0	28,2	10,150		158. 28. 28,08	29,746	32,2	30,0	81. 12. 49,10	B.
	π Leonis.....	2. 58,0	60,1	58,9	56,1	56,7	59,5		+3	65. 17. 58,86				81. 12. 52,52	B.
Feb. 1	⊙ N.L.....	4. 19,0	21,9	20,9	17,0	19,0	21,1	13,981		91. 3. 2,57	29,916	36,0	35,6	106. 59. 35,28	B.
	⊙ S.L.....	0. 31,0	32,1	30,9	27,1	29,5	29,8			91. 35. 30,13				107. 32. 7,33	B.
	Venus S.L.....	1. 38,0	40,0	37,1	37,1	38,0	39,1			82. 46. 38,45	29,926	37,0	36,6	98. 42. 21,83	B.
	Venus N.L.....	...	...	...	...	...	...	10,854		82. 46. 25,76				98. 42. 9,14	B.
	α Andromedæ R. .	4. 11,0	11,0	12,0	8,9	10,9	13,0	8,700		177. 54. 43,92	29,924	37,3	35,9	61. 46. 3,31	B.
	α Andromedæ.....	1. 38,2	41,8	38,7	37,0	39,0	40,9			45. 51. 39,50				61. 46. 2,25	B.
	α Cassiopeiæ R. .	1. 35,6	35,0	35,0	35,1	35,2	38,0	10,661		205. 21. 27,20				34. 18. 49,68	B.
	α Cassiopeiæ.....	4. 55,1	58,0	57,2	52,9	55,9	57,0		+1	18. 24. 56,94				34. 18. 49,34	B.
	(g) H. C. 4925.....	1. 61,9	61,0	62,1	57,9	60,5	61,3			58. 2. 1,07	29,926	34,9	32,5	73. 56. 41,28	B.
	α Persei R.....	3. 25,9	30,0	26,1	25,9	26,2	28,1	9,329	+1¼	198. 58. 46,63	29,920	34,7	30,4	40. 41. 36,98	B.
	(h) α Persei.....	2. 41,2	42,0	43,0	39,9	41,0	43,1		+3	24. 47. 43,65				40. 41. 42,78	B.
	γ Eridani R.....	1. 24,1	24,9	24,4	22,1	24,9	25,9	13,871		135. 45. 9,02	29,916	34,5	30,0	103. 57. 28,15	B.
	γ Eridani.....	1. 17,5	17,0	17,1	14,1	15,0	17,4		+1½	88. 1. 16,45				103. 57. 29,14	B.
	μ Geminorum.....	0. 17,0	17,4	16,0	13,6	15,0	19,0			51. 30. 16,38	29,850	33,6	28,0	67. 24. 47,05	B.
	ε Geminorum.....	3. 49,0	49,8	51,8	46,1	49,0	50,2			48. 48. 9,87				64. 43. 16,85	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10",218, 10",229, 10",245, 10",257, 10",267 at the five wires.
 ONE REVOLUTION = 20",838. CORRECTION for RUNS = +1",5. From Jan. 31 = +4",3. ZENITH POINT = 21°. 53', 11",76.
 From Feb. 1 = 21°. 53'. 12",24. ASSUMED CO-LATITUDE = 37°. 47'. 8",28.

(a) Indefinite image. (b) Very faint. (c) Excessively faint from clouds. (d) The micrometer readings have been increased 1". (e) Faint from clouds, and mercury unsteady. (f) Too close to fixed wire. (g) Faint. (h) Hurried.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading. r.	Interval of Obs. from Middle Wire.	Concluded Circle reading. ° ' "	Barom. Inch.	Thermom.		Apparent N.P.D. from the Observation. ° ' "	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					°	°		
Feb. 1	(a) N.L.	2.11,0	10,7	10,1	7,3	8,1	11,4	9,420	-2	53.12.30,39	29,828	32,7	27,6	69.7.3,50	B.
	» N.L. ....	...	...	...	...	...	...	9,330	-1	53.12.30,60				69.7.3,71	B.
	» N.L. ....	...	...	...	...	...	...	9,247		53.12.30,88				69.7.3,99	B.
	» N.L. ....	...	...	...	...	...	...	9,179	+1	53.12.30,89				69.7.4,00	B.
	» N.L. ....	...	...	...	...	...	...	9,107	+2	53.12.31,04				69.7.4,15	B.
	δ Geminorum R. .	1.22,0	24,0	23,1	21,1	22,0	22,6	9,477		171.56.38,68				67.44.16,93	B.
	δ Geminorum.	4.43,4	44,9	44,8	40,0	41,1	46,9		+1½	51.49.44,32				67.44.15,45	B.
	(b) Pollux R.	4.22,7	26,1	26,0	22,1	24,4	26,0	10,011		178.4.30,06	29,812	32,0	27,0	61.36.17,37	B.
	Pollux.	1.52,0	53,9	53,0	49,0	52,1	53,9		+1½	45.41.52,76				61.36.15,71	B.
Feb. 2	δ Geminorum.	4.43,3	42,0	44,7	39,0	43,0	47,1				29,602	31,5	28,5	67.44.14,65	B.
	(c) k Geminorum.	1.5,7	4,0	4,9	1,5	2,4	4,1		+1½	57.56.4,02				73.50.43,97	B.
	(d) N.L.	4.22,3	20,0	22,8	19,1	21,0	24,7	8,217	-2	56.10.9,24	29,634	31,2	27,6	72.4.46,52	B.
	» N.L. ....	...	...	...	...	...	...	8,159	-1	56.10.8,00				72.4.45,28	B.
	» N.L. ....	...	...	...	...	...	...	7,971		56.10.9,67				72.4.46,95	B.
	» N.L. ....	...	...	...	...	...	...	7,859	+1	56.10.9,78				72.4.47,06	B.
	» N.L. ....	...	...	...	...	...	...	7,770	+2	56.10.9,47				72.4.46,75	B.
	ζ Cancri. np.	3.46,1	43,1	45,0	41,1	44,0	46,9			55.58.44,90				71.53.21,90	B.
	ο Ursæ Majoris R. .	4.27,0	29,0	27,8	27,9	28,1	30,1	11,478		210.54.3,25	29,648	31,1	28,7	28.46.7,68	B.
	ο Ursæ Majoris.	2.24,8	21,9	24,3	21,6	22,0	25,9			12.52.23,77				28.46.10,22	B.
	(c) θ Cancri.	3.31,5	29,6	30,1	27,7	29,1	32,4			55.28.30,57				71.23.6,72	B.
	⊙ S.L.	0.39,0	41,0	40,1	37,9	41,0	42,1	8,983		91.1.6,70	29,884	34,9	34,4	106.57.39,39	B.
	⊙ N.L.	3.42,8	42,1	43,1	41,6	42,8	44,0			90.28.43,22				106.25.11,64	B.
	(e) Capella R.	0.23,0	25,2	22,2	21,6	23,8	23,9	10,194	+2	195.30.24,36	29,864	34,4	31,1	44.10.2,93	B.
Feb. 3	(f) Capella.	0.50,0	40,9	49,3	49,1	50,0	51,1		+4½	28.15.53,13				44.9.55,94	B.
	α Orionis.	0.39,1	38,9	37,0	38,3	40,0	40,0		+1	68.15.38,98				84.10.38,48	B.
	β Aurigæ R.	0.13,7	15,6	13,2	14,7	15,0	15,1	8,100		194.35.59,40				45.4.28,86	B.
	β Aurigæ.	0.23,1	22,9	22,6	21,4	22,8	24,1			29.10.22,87				45.4.26,65	B.
	1 Lyncis R.	3.26,0	28,0	23,8	26,9	27,0	27,5	9,682		211.13.38,84	29,850	34,4	31,3	28.26.31,73	B.
	1 Lyncis.	2.44,9	45,1	46,2	45,1	46,0	47,4		+¾	12.32.46,29				28.26.32,38	B.
	(g) γ Geminorum R. .	2.25,0	24,8	25,9	24,9	25,2	26,7	9,867		166.12.33,73	29,846	33,9	30,6	73.28.30,27	B.
	γ Geminorum.	3.48,0	48,9	49,1	46,7	49,2	50,8		+1½	57.33.49,38				73.28.28,90	B.
	15 Lyncis R.	2.23,1	24,9	23,5	22,2	24,8	25,0	10,493		208.17.19,19				31.22.54,53	B.
	(h) 15 Lyncis.	4.5,7	2,9	5,0	3,2	4,1	6,1		+1	15.29.5,28				31.22.54,52	B.
	θ Cancri.	3.31,8	31,0	31,0	27,0	31,2	33,0			55.28.31,28	29,832	32,0	29,5	71.23.7,62	B.
	» S.L.	0.26,0	26,0	24,9	21,7	23,0	25,8	10,720	-2	60.45.20,78	29,828	31,5	29,0	76.40.5,76	B.
	» S.L. ....	...	...	...	...	...	...	10,620	-1	60.45.19,82				76.40.4,80	B.
	» S.L. ....	...	...	...	...	...	...	10,408		60.45.21,35				76.40.6,33	B.
	(i) » S.L. ....	...	...	...	...	...	...		+1	60.45.21,48				76.40.6,46	B.
	» S.L. ....	...	...	...	...	...	...	10,157	+2	60.45.20,83				76.40.5,81	B.
	κ Cancri.	2.53,0	52,9	52,1	49,9	50,0	54,1			62.47.52,38				78.42.41,03	B.
	ξ Leonis.	1.13,0	11,0	11,9	10,1	10,3	13,5			62.6.11,78	29,812	31,4	28,9	78.0.59,14	B.
Feb. 5	(k) ⊙ S.L.	1.30,9	27,6	30,1	27,0	29,9	30,7	12,659		90.25.39,38	29,338	33,9	32,8	106.22.5,14	B.
	⊙ N.L.	3.11,0	10,4	11,6	9,0	11,6	14,5			89.53.11,77				105.49.33,54	B.
	Venus S.L.	1.47,7	46,1	47,0	47,0	48,0	50,1			80.46.47,88				96.42.21,89	B.
	Venus N.L. ....	...	...	...	...	...	...	10,871		80.46.34,96				96.42.8,97	B.
	ι Arietis.	1.62,1	61,1	61,2	59,1	62,0	62,7			57.2.1,63	29,370	33,9	29,9	72.56.39,69	B.
	(l) i Persei R.	2.26,1	27,0	26,3	26,3	27,1	29,0	7,849		204.48.17,84				34.52.0,14	B.
	i Persei.	3.8,1	6,4	8,2	5,0	7,0	9,0		+¾	18.58.7,80				34.52.0,80	B.
	B.A.C. 845.	2.56,3	54,9	56,9	54,0	55,9	57,0		+1	64.37.56,25	29,368	32,0	28,5	80.32.47,59	B.
	(g) α Persei R.	3.33,0	31,0	30,1	29,9	31,0	33,0	9,753		198.58.42,17				40.41.41,39	B.
	(m) α Persei.	2.41,9	40,2	42,0	39,0	41,2	43,0		+2¼	24.47.42,46				40.41.41,54	B.
	π Leonis.	2.56,8	56,0	56,3	55,0	55,0	58,1			65.17.56,58	29,440	26,4	19,5	81.12.50,47	B.
	(n) Regulus R.	4.26,1	24,0	27,0	24,1	25,8	28,9	9,921		162.24.33,43				77.16.37,46	B.
	Regulus.	1.50,2	49,0	50,5	46,8	50,1	51,9		+1½	61.21.50,06				77.16.36,47	B.
	» S.L.	3.15,9	13,1	16,0	12,8	13,7	18,1	11,080	-2	71.13.5,33	29,436	26,0	18,9	87.8.12,59	B.
	» S.L. ....	...	...	...	...	...	...	10,811	-1	71.13.7,24				87.8.14,50	B.
	» S.L. ....	...	...	...	...	...	...	10,630		71.13.7,45				87.8.14,71	B.
	» S.L. ....	...	...	...	...	...	...	10,389	+1	71.13.8,84				87.8.16,10	B.
	» S.L. ....	...	...	...	...	...	...	10,220	+2	71.13.8,71				87.8.15,97	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',218, 10',229, 10',245, 10',257, 10',267 at the five wires.
 From Feb. 3 = 10',224, 10',235, 10',251, 10',263, 10',273. ONE REVOLUTION = 20",838. CORRECTION for RUNS = +4",3.
 From Feb. 3 = +3",9. ZENITH POINT = 21°.53'.12",24. ASSUMED Co-LATITUDE = 37°.47'.8",28.

(a) Misty. (b) Badly defined image, close to fixed wire: bisection doubtful. (c) Cloudy. (d) The micrometer readings have been diminished by 1". (e) Discordant observation. (f) Very much hurried. (g) Badly defined image. (h) Doubtful bisection: wires too close. (i) Bisected at this time by the fixed wire. (k) Much fringed. (l) The micrometer reading was 2'.849. (m) The Clamp failed. (n) Mercury very unsteady.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.	
		A	B	C	D	E	F					Int.	Ext.			
		"	"	"	"	"	"					"	"			
Feb. 5	d Leonis	2.58,2	56,7	58,9	54,7	56,9	60,1	11,230	+1½	69.37.57,97	29,436	26,0	18,9	85.33.1,37	B.	
	φ Leonis	2.49,9	47,0	50,0	46,1	46,9	50,5			76.52.48,77	29,442	25,3	18,3	92.48.12,24	B.	
	α Cygni R.	4.21,2	23,1	23,0	21,0	23,8	25,0			194.24.3,02	29,480	33,3	33,4	45.16.25,32	B.	
	(a) α Cygni.	2.20,8	20,9	20,3	20,0	21,9	22,2			29.22.21,66				45.16.25,52	B.	
Feb. 6	☉ N.L.	1.26,5	27,1	26,0	26,0	27,9	29,0	14,310	6,859	89.35.2,69	29,474	34,1	34,6	105.31.22,42	B.	
	☉ S.L.	2.26,1	26,4	27,0	26,1	27,1	28,2	90.7.27,13						106.3.50,75	B.	
	(b) Aldebaran R.	1.20,0	18,9	20,0	18,8	21,0	22,6	165.52.31,06		29,420	33,0	28,9	73.48.33,00	B.		
	Aldebaran	3.52,9	51,1	52,9	50,0	53,0	55,1	57.53.53,00						73.48.32,58	B.	
	B.A.C. 1661	0.12,0	10,9	11,9	10,8	11,7	11,9	6,047	+¾	70.40.11,57	29,408	32,6	28,2	86.35.16,02	B.	
	m Orionis			70.41.39,17					86.36.43,68	B.
	A Orionis	0.40,4	38,8	37,2	37,9	40,9	42,0			68.15.39,62					84.10.38,54	B.
	31 Camelopardi R.	1.24,8	27,2	23,9	25,6	27,1	27,0			209.30.59,67	11,520			28,4	30.9.12,82	B.
	31 Camelopardi ...	0.25,0	24,0	23,2	24,6	25,5	26,9			14.15.25,07				30.9.13,08	B.	
Feb. 7	(c) ☉ N.L.	1.41,2	41,8	41,1	40,0	42,8	42,9		+3	89.16.42,15	29,180	38,1	39,0	105.12.57,04	B.	
Feb. 8	☉ S.L.	0.35,6	37,1	35,0	34,7	39,0	39,9	11,019	+1	89.30.20,88	29,244	39,3	39,0	105.26.37,62	B.	
	☉ N.L.	2.58,0	60,7	58,1	57,1	59,9	57,5	88.57.59,12						104.54.12,23	B.	
	Venus S.L.	0.3,0	8,2	4,0	3,9	6,1	5,8	79.15.5,18		29,240	40,1	40,5	95.10.31,76	B.		
	Venus N.L. ....	...	...	...	...	...	...	79.14.51,60		10,899				95.10.18,18	B.
	(d) 15 Lyncis R.	2.20,1	23,1	19,9	19,6	22,1	23,9	8,271	+1	208.17.21,75	29,222	35,9	33,9	31.22.52,16	B.	
	15 Lyncis	4.3,9	2,9	3,2	0,1	3,1	5,0			15.29.3,55					31.22.52,98	B.
	(e) Castor R.	3.23,0	23,0	21,9	21,7	23,5	26,7			181.54.4,91					57.46.37,04	B.
	Castor	2.18,1	20,1	18,8	15,2	19,1	21,2			41.52.19,12					57.46.36,59	B.
	(f) Pollux R.	4.29,5	31,0	27,0	27,4	30,2	33,0	7,820	+3	178.4.30,25	29,216	35,4	33,4	61.36.16,28	B.	
	Pollux	1.52,6	53,9	51,8	47,9	53,0	54,0			45.41.53,16					61.36.15,21	B.
	α Lyræ R.	3.2,7	3,9	3,9	4,0	4,4	7,2			188.18.55,32	29,108	40,0	32,4	51.21.39,41	B.	
	α Lyræ	2.28,1	27,0	27,1	26,2	29,3	29,8			35.27.28,22					51.21.38,47	B.
Feb. 9	(b) ☉ N.L.	4.31,1	31,0	31,3	32,0	33,0	34,1	11,851		88.38.59,23	29,084	38,0	37,2	104.35.10,06	B.	
	☉ S.L.	1.24,0	23,5	21,8	22,9	24,4	24,9			89.11.23,77				105.7.38,14	B.	
Feb. 10	(b) ☉ S.L.	2.21,9	21,9	21,2	21,8	22,2	24,0	10,901	+2	88.52.8,85	29,418	36,4	36,5	104.48.22,87	B.	
	☉ N.L.	4.47,0	47,0	48,0	46,1	48,0	49,1	88.19.48,13						104.15.58,65	B.	
	(b) α Persei R.	3.30,0	29,7	27,1	28,8	29,2	31,9	198.58.46,91		29,526	36,5	33,1	40.41.36,64	B.		
	α Persei	2.43,1	42,0	42,6	40,0	44,4	44,1	24.47.43,73						40.41.42,80	B.	
	δ Persei R.	2.23,1	22,9	21,1	20,9	22,7	24,0	9,455	+1½	196.57.39,26	29,528	36,0	32,9	42.42.46,40	B.	
	δ Persei	3.45,9	45,1	44,9	41,2	46,0	46,8	26.48.45,84						42.42.47,02	B.	
	(g) Capella R.	0.54,9	55,8	54,3	54,6	56,9	56,6	195.30.33,98		11,229	29,556	36,1	33,9	44.9.53,20	B.	
	Capella	1.14,1	12,3	12,0	9,8	12,0	13,9	28.15.51,47		11,229				44.9.54,17	B.	
	Castor R.	3.32,1	31,9	31,9	29,2	32,0	34,8	8,681	6,531	181.54.5,07	29,586	35,0	32,6	57.46.37,20	B.	
	Castor	2.19,9	18,0	18,8	16,0	18,0	21,7	41.52.19,02						57.46.36,81	B.	
	(h) Pollux R.	3.14,4	14,1	14,2	12,2	14,1	16,0	178.4.32,14						61.36.14,77	B.	
	Pollux	1.55,0	53,8	52,2	48,9	53,0	55,0	45.41.53,22						61.36.15,65	B.	
	υ Ursæ Majoris R.	1.34,3	34,0	33,9	31,6	35,8	35,8	11,560	+¾	209.26.7,07	29,594	33,9	32,2	30.14.5,52	B.	
	υ Ursæ Majoris ...	0.19,1	19,0	18,0	17,0	19,0	19,1	14.20.18,72						30.14.6,83	B.	
Feb. 13	☉ N.L.	1.24,2	22,9	25,0	22,1	23,1	25,2	12,552	+1	87.20.35,90	30,016	31,8	30,1	103.16.44,80	B.	
	☉ S.L.	2.59,0	58,0	59,8	56,1	56,8	58,9	87.52.58,68						103.49.10,93	B.	
	(i) Venus N.L.	4.25,7	25,7	26,0	24,9	26,1	28,0	76.39.26,62		30,004	34,6	35,5	92.34.47,83	B.		
	Venus S.L. ....	...	...	...	...	...	...	76.39.39,28						92.35.0,49	B.
	(k) α Andromedæ R. .	4.17,0	16,1	17,1	15,0	17,0	20,0	9,081	10,321	177.54.41,88				61.46.5,44	B.	
	α Andromedæ	1.42,0	42,0	41,9	39,0	41,9	42,9	45.51.41,83						61.46.4,67	B.	
	(l) α Cassiopeiæ R. ...	1.28,1	27,9	26,0	27,0	27,6	30,1	205.21.26,43			35,9	36,1	34.18.50,44	B.		
	(m) Polaris R.	4.15,0	14,0	13,0	12,9	14,7	17,1	238.8.40,56		11,871		36,9	36,4	1.30.55,85	B.	
	(m) Polaris	2.43,1	41,1	43,1	42,0	45,3	45,1	345.37.44,55	5,761	153.10.0,50	30,008	35,3	32,4	86.31.29,05	B.	
	α Ceti R.	3.20,9	21,2	22,0	19,8	22,6	25,3	70.36.28,67						86.31.33,74	B.	
	(a) α Ceti	1.28,9	28,0	27,3	27,8	27,8	30,0	198.58.41,10		8,768				40.41.42,50	B.	
	α Persei R.	3.10,7	9,9	9,2	8,0	9,3	12,1	24.47.42,60						40.41.41,72	B.	
	α Persei	2.43,1	41,9	41,9	39,0	43,8	43,9									

MICROMETER READING for COINCIDENCE with fixed Wire = 10',224, 10',235, 10',251, 10',263, 10',273 at the five wires.
 From Feb. 8 = 10',220, 10',231, 10',247, 10',259, 10',269. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = + 3'',9.
 From Feb. 8 = + 3'',8. ZENITH POINT = 21°.53'.12'',24. ASSUMED Co-LATITUDE = 37°.47'.8'',28.

(a) Hurried. (b) Cloudy. (c) S.L. lost by wrong setting: this taken hurriedly. The divisions were barely visible from moisture. (d) Accidentally on the fixed wire. (e) Bisection doubtful: too much wind. (f) Indefinite: appeared to be bisected by the fixed wire. (g) Excessively faint from clouds. (h) The Microscope readings have been diminished 1'. (i) Very unsteady. (k) Faint. (l) Faint, and too close to fixed wire. (m) At times by Molyneux (M), 1^h.7^m.48^s and 1^h.8^m.42^s. M fast on Hardy (H), 2^m.11^s.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"								
Feb. 13	B. v. 303..... B. v. 623..... Ursæ Majoris R.. Ursæ Majoris....	3.55,0 0.58,0 4.24,8 2.11,4	54,2 57,6 25,9 9,8	54,9 56,1 25,0 11,4	53,1 56,0 23,9 7,8	54,9 55,0 25,1 9,2	57,9 60,0 27,9 12,1	10,829	+2	70.13.55,54 68.0.57,23 198.19.13,85 25.27.10,57	30,008 30,002	33,1 31,7	28,8 27,2	86.9.0,23 83.55.56,80 41.21.10,49 41.21.10,43	B. B. B. B.
Feb. 16	(a) ☉ N.L..... ☉ S.L..... Venus S.L..... Venus N.L..... B. v. 303..... B. v. 623..... (b) B. v. 802..... 1 Lyncis R..... 1 Lyncis..... (c) δ Ursæ Min. SP. R. (c) δ Ursæ Minoris SP. (c) δ Ursæ Min. SP. R. (c) δ Ursæ Minoris SP. (d) ζ Geminorum R.. ζ Geminorum....	1.22,1 1.51,8 0.25,7 ... 3.58,0 0.59,1 1.41,2 3.23,9 2.42,2 4.16,9 2.23,1 4.12,9 2.45,2 3.13,9 2.55,2	23,8 53,1 28,1 ... 57,6 58,8 40,1 24,6 41,1 17,1 20,1 12,8 42,2 14,9 54,1	23,0 53,9 25,0 ... 56,9 56,9 21,8 21,8 41,4 15,9 17,9 10,9 42,0 14,1 53,2	23,1 53,8 26,1 ... 54,9 59,8 37,9 22,0 39,4 15,0 17,9 9,9 41,0 13,9 52,9	25,9 55,0 29,7 ... 60,9 59,2 42,0 24,1 43,8 20,3 23,0 14,0 45,0 17,9 56,1	25,1 54,9 29,2 ... 59,8 59,2 41,2 25,9 44,1 20,3 23,7 15,1 44,9 17,9 57,0	15,529 10,860 9,399 11,016 11,288 9,719	+2 +2 +4½ +1¼ +½ +3	86.19.33,89 86.51.53,98 75.5.27,35 75.5.14,54 70.13.58,48 68.0.58,49 66.51.40,66 211.13.41,75 12.32.42,76 243.4.1,81 340.42.20,97 243.4.3,42 340.42.21,88 170.28.26,76 53.17.55,61	30,092 30,098 30,102 30,110	41,1 42,9 45,7 39,6 39,2	43,7 45,7 36,6 38,3	102.15.33,58 102.47.56,68 91.0.42,38 91.0.29,57 86.9.2,26 83.55.57,22 82.46.36,92 28.26.28,84 28.26.28,87 -3.24.33,86 -3.24.35,56 -3.24.35,47 -3.24.34,65 69.12.30,54 69.12.28,43	B. B. B. B. B. B. B. B. B. B. B. B. B. B. B.
Feb. 17	(e) ☉ N.L..... ☉ S.L.....	4.21,1 1.6,2	22,8 7,3	21,9 6,1	20,5 6,1	22,8 8,0	23,2 6,0	11,802		85.58.50,13 86.31.6,75	29,550	42,7	44,9	101.54.45,46 102.27.4,95	B. B.
Feb. 19	ε Hydræ R..... (f) ε Hydræ..... (g) H. C. 17526..... υ Ursæ Majoris R.. υ Ursæ Majoris... π Leonis R..... π Leonis..... (d) μ Hydræ R..... μ Hydræ.....	4.6,4 1.2,7 4.61,5 1.24,0 0.14,9 4.23,1 2.58,9 0.28,1 1.22,6	8,0 4,1 61,0 26,9 15,1 25,0 59,9 28,0 22,1	8,2 2,9 62,1 24,1 14,2 24,9 58,9 27,1 21,9	4,0 1,0 59,0 23,9 13,2 21,1 56,9 26,8 20,3	7,1 2,0 59,9 26,9 14,2 25,0 58,9 27,8 21,1	8,8 3,9 62,1 27,0 15,9 26,8 60,1 29,7 24,0	6,772 11,048 13,121 11,490	+4½ +2¼ +1½ +4½	156.40.19,95 67.6.3,26 29.50.0,93 209.26.8,90 14.20.14,62 158.28.24,91 65.17.59,41 133.40.2,47 90.6.21,29	29,460 29,476 29,492 29,496	36,1 36,0 36,1 35,9	33,6 33,4 33,4 33,2	83.1.0,38 83.0.59,11 45.44.5,27 30.14.3,74 30.14.2,78 81.12.51,86 81.12.51,70 106.2.46,04 106.2.45,32	B. B. G. B. B. B. B. B. B.
Feb. 20	(h) ☉ S.L..... ☉ N.L..... B. v. 303..... * R. 5 ^h . 26 ^m . 23 ^s . (i) B. v. 802..... (k) β Aurigæ R..... β Aurigæ..... 1 Lyncis R..... 1 Lyncis..... (l) δ Ursæ Min. SP. R. (l) δ Urse Minoris SP.	2.29,5 0.21,1 3.56,9 3.31,7 1.39,5 0.29,1 0.22,8 3.16,1 2.42,2 4.20,1 2.28,5	27,9 20,3 54,2 31,0 38,9 30,1 21,0 18,8 41,9 21,3 26,1	29,1 20,9 57,1 32,4 38,0 29,9 22,5 16,2 43,0 19,8 26,5	26,8 20,0 54,0 29,2 35,0 31,1 19,1 15,1 38,7 17,1 24,1	28,8 20,1 56,3 31,5 38,4 31,1 20,2 18,9 44,0 22,0 27,6	30,0 21,1 58,0 33,7 39,0 31,1 22,9 18,0 43,1 22,1 28,8	9,610 8,791 9,029 11,156	+1 +2½ 						

MICROMETER READING for COINCIDENCE with fixed Wire = 10',220, 10',231, 10',247, 10',259, 10',269 at the five wires.
 From Feb. 16 = 10',223, 10',231, 10',245, 10',258, 10',266. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = + 3'',8.
 From Feb. 16 = + 3'',6. ZENITH POINT = 21°. 53'. 12'',24. ASSUMED CO-LATITUDE = 37°. 47'. 8'',28.

(a) Much fringed. (b) Not good: star very faint. Bessel's N.P.D. is greater by 25''. (c) Times by M, 6^h. 24^m. 3^s, 6^h. 25^m. 7^s, 6^h. 33^m. 11^s, 6^h. 36^m. 31^s. M fast on H, 1^m. 16^s. Clouds passing during the two last. (d) The mercury agitated. (e) Cloudy: taken hurriedly. (f) The clamp-screw failed. (g) Thought to be double, but observed as single. A much fainter of 3' greater N.P.D. preceded about 4''. (h) Limbs fringed. (i) Doubtful bisection, the object being very faint. (k) Indefinite image. (l) Mercury unsteady. Times by M, 6^h. 28^m. 12^s and 6^h. 29^m. 19^s. M fast on H, 1^m. 15^s. (m) Doubtful bisection. (n) Too close to fixed wire. (o) The micrometer reading has been diminished 1'.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	o	o	o	
Feb. 22	(a) Regulus R.	4. 11,5	12,1	13,9	10,0	13,2	13,1	9,359	+1½	162. 24. 31,53	29,650	29,9	25,4	77. 16. 39,08	B.
	Regulus.	1. 51,9	53,0	52,9	49,1	51,9	53,1		+3	61. 21. 52,52				77. 16. 38,65	B.
Feb. 23	☉ N.L.	1. 25,9	26,0	25,0	25,0	27,4	25,9	13,327		83. 50. 21,81	29,650	35,0	36,0	99. 46. 9,11	B.
	☉ S.L.	2. 39,5	42,1	39,9	37,8	41,4	40,1			84. 22. 40,45				100. 18. 30,29	B.
Feb. 24	(b) S.L.	3. 34,9	35,9	34,1	31,0	36,7	36,9	12,860	-2	55. 22. 36,63	29,336	36,8	34,6	71. 17. 11,73	B.
	» S.L. ....	...	...	...	...	...	...	12,958	-1	55. 22. 36,51				71. 17. 11,61	B.
	» S.L. ....	...	...	...	...	...	...	13,023		55. 22. 37,33				71. 17. 12,43	B.
	» S.L. ....	...	...	...	...	...	...	13,120	+1	55. 22. 37,56				71. 17. 12,66	B.
	» S.L. ....	...	...	...	...	...	...	13,240	+2	55. 22. 37,32				71. 17. 12,42	B.
	B. v. 1015.	1. 13,1	13,9	12,9	12,1	13,9	14,1			66. 11. 13,48	29,474	35,3	32,3	82. 6. 7,64	B.
Feb. 26	(c) ☉ S.L.	2. 24,9	25,0	24,1	24,1	25,1	25,8	13,240		83. 16. 22,32	28,560	43,1	45,8	99. 12. 1,64	B.
	(d) Mercury, centre. .	1. 13,6	12,9	11,9	10,8	11,0	13,1			92. 1. 12,22	29,350	33,4	30,4	107. 57. 52,53	B.
Feb. 27	(d) ☉ N.L.	3. 13,8	13,0	15,0	13,2	14,0	15,0	15,010		82. 21. 34,60	29,350	34,0	33,4	98. 17. 15,56	B.
	☉ S.L.	3. 51,7	52,3	52,1	51,1	52,0	53,0			82. 53. 52,07				98. 49. 35,33	B.
	Venus S.L.	0. 2,3	4,0	2,4	2,6	3,7	2,4			69. 20. 2,90	29,346	36,1	36,6	85. 15. 3,64	B.
	Venus N.L. ....	...	...	...	...	...	...	10,927		69. 19. 48,55				85. 14. 49,29	B.
	(e) 15 Lyncis R.	2. 27,8	28,9	27,2	26,9	29,1	29,1	10,316		208. 17. 26,57	29,340	36,4	35,8	31. 22. 46,64	B.
	15 Lyncis.	3. 56,3	56,2	57,9	54,9	58,0	58,4			15. 28. 56,98				31. 22. 47,11	B.
	♂ Geminorum R.	1. 14,3	16,1	14,9	14,9	17,0	16,2	9,100		171. 56. 39,32	29,346	36,4	36,2	67. 44. 14,40	B.
	♂ Geminorum.	4. 42,9	41,9	43,0	39,1	44,1	44,4		+1½	51. 49. 42,76				67. 44. 13,40	B.
	Castor R.	3. 25,0	24,8	24,9	24,1	26,0	27,8	8,301	+3	181. 54. 5,86				57. 46. 35,37	B.
	(f) Castor.	2. 16,1	16,0	15,8	13,9	16,9	18,1		+3	41. 52. 17,01				57. 46. 35,16	B.
	(g) ♀ Ursæ Majoris R. .	4. 9,7	8,9	10,2	8,8	8,1	11,0	9,979	+1½	198. 19. 14,89	29,358	36,6	36,5	41. 21. 8,60	B.
	♀ Ursæ Majoris. .	2. 7,0	6,8	8,3	4,7	7,1	7,4		+3	25. 27. 8,44				41. 21. 8,85	B.
	Mercury, centre. .	4. 53,0	54,0	52,8	53,1	53,9	53,9			91. 49. 53,50	29,560	40,0	42,5	107. 46. 29,22	B.
Feb. 28	☉ S.L.	2. 19,8	21,8	18,6	18,9	21,0	19,9	12,974		82. 31. 23,02	29,576	42,2	43,7	98. 27. 3,22	B.
	(h) ☉ N.L.	4. 4,9	6,9	5,1	4,6	4,1	5,5			81. 59. 5,23				97. 54. 43,21	B.
	Venus S.L.	3. 58,0	59,0	58,0	58,1	61,0	61,0			68. 48. 59,22	29,550	43,8	45,3	84. 43. 58,11	B.
	Venus N.L. ....	...	...	...	...	...	...	10,911		68. 48. 45,22				84. 43. 44,11	B.
Feb. 29	Venus S.L.	3. 1,1	3,1	1,1	0,8	5,0	3,0			68. 18. 2,38	29,528	45,3	46,2	84. 13. 0,00	B.
	Venus N.L. ....	...	...	...	...	...	...	10,880		68. 17. 49,03				84. 12. 46,65	B.
	(b) Mercury, centre. .	3. 12,9	14,1	12,0	12,9	13,8	14,1			91. 23. 13,33	29,332	44,5	47,8	107. 19. 42,46	B.
Mar. 1	☉ N.L.	4. 45,8	45,1	46,0	45,1	47,6	47,8	13,138		81. 13. 46,29	29,376	46,7	49,2	97. 9. 19,50	B.
	(h) ☉ S.L.	0. 59,0	63,0	61,1	62,8	61,2	60,9		+3	81. 46. 2,04				97. 41. 37,34	B.
	(i) Polaris R.	4. 20,9	19,9	17,1	18,0	20,1	22,1	11,981		238. 8. 39,41	29,336	49,4	50,2	1. 30. 58,50	B.
	(i) Polaris.	2. 40,3	39,2	39,7	39,7	42,9	42,8			345. 37. 44,22				1. 30. 59,05	B.
	Venus S.L.	2. 13,2	14,6	11,9	14,8	14,9	16,6			67. 47. 14,50				83. 42. 10,17	B.
	Venus N.L. ....	...	...	...	...	...	...	10,951		67. 46. 59,76				83. 41. 55,43	B.
	η Aurigæ R.	1. 14,9	17,0	13,9	16,0	16,6	18,0	9,109		190. 41. 39,82	29,400	45,6	43,4	48. 58. 51,50	B.
	η Aurigæ.	4. 42,9	41,9	41,0	40,1	43,1	45,0		+1	33. 4. 42,83				48. 58. 51,07	B.
	(k) B. v. 294.	4. 4,8	5,9	2,9	3,9	5,1	7,7	4,479		69. 46. 5,50				85. 41. 6,42	B.
	(l) B. v. 925.	2. 37,0	35,0	33,4	33,8	36,0	37,0	6,159	+4½	66. 44. 1,84				82. 38. 56,32	B.
	(f) ♄ Cancri.	3. 47,4	45,9	45,0	44,5	47,8	49,0		+4½	55. 58. 47,88	29,346	43,3	42,0	71. 53. 23,98	B.
	(m) N.L.	0. 50,2	49,0	48,4	47,8	50,1	51,0	11,085	-2	58. 15. 37,33	29,342	43,4	41,8	74. 10. 16,90	B.
	» N.L. ....	...	...	...	...	...	...	10,970	-1	58. 15. 36,93				74. 10. 16,50	B.
	» N.L. ....	...	...	...	...	...	...	10,824		58. 15. 37,39				74. 10. 16,96	B.
	» N.L. ....	...	...	...	...	...	...	10,722	+1	58. 15. 37,00				74. 10. 16,57	B.
	» N.L. ....	...	...	...	...	...	...	10,540	+2	58. 15. 38,26				74. 10. 17,83	B.
	(m) ♄ Cancri.	2. 12,2	10,7	10,0	8,9	12,1	13,1			55. 22. 11,33				71. 16. 46,54	B.
	α♄ Cancri.	2. 59,0	58,8	58,0	56,1	59,6	60,1			61. 37. 58,83	29,338	43,1	41,3	77. 32. 43,96	B.
	h Ursæ Majoris R. .	0. 14,8	13,1	11,0	12,9	14,1	14,9	12,769		213. 24. 20,86	29,308	42,9	40,9	26. 15. 47,09	B.
	h Ursæ Majoris. .	1. 62,1	60,0	60,8	58,9	60,1	62,2		+1	10. 22. 1,13				26. 15. 46,00	B.
	v Ursæ Majoris R. .	1. 17,9	17,8	15,0	16,9	17,9	19,9	10,591		209. 26. 10,44	29,300	41,3		30. 14. 1,66	B.
	v Ursæ Majoris. .	0. 13,1	12,1	12,0	11,9	12,9	13,2		+1½	14. 20. 13,13				30. 14. 2,15	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',223, 10',231, 10',245, 10',258, 10',266 at the five wires. From Feb. 24 = 10',217, 10',225, 10',239, 10',252, 10',260. From March 1 = 10',222, 10',230, 10',244, 10',257, 10',265. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = + 3'',6. From Feb. 26 = + 0'',3. From March 1 = + 2'',3. ZENITH POINT = 21°. 53'. 12''.24. From Feb. 26 = 21°. 53'. 11''.54. ASSUMED CO-LATITUDE = 37°. 47'. 8''.28.

(a) Indefinite image. (b) Faint. (c) N.L. clouded. (d) The microscope readings have been increased 1'. (e) Too close to fixed wire. (f) Faint from clouds. (g) Unsteady mercury. (h) Cloudy. (i) Times by M, 0h. 54m. 41s and 0h. 55m. 53s. M fast on H, 1m. 23s. (k) Doubtful from faintness. (l) The Clamp-screw failed. (m) Misty.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Mar. 1	(a) λ Ursæ Majoris R.	2.55,0	54,2	53,7	53,2	54,0	56,0	13,632		193.21.43,97	29,272	43,0	42,4	46.18.44,54	B.
	λ Ursæ Majoris...	4.40,1	38,0	38,2	35,8	38,1	40,8		+1 $\frac{1}{2}$	30.24.39,18				46.18.44,61	B.
Mar. 2	(b) \odot S.L.	3.19,0	17,1	18,1	18,9	19,0	20,6	10,734	+2	81.23.9,72	29,352	45,5	44,9	97.18.44,31	B.
	\odot N.L.	0.52,7	52,9	50,7	51,0	52,0	52,3		+3	80.50.52,63				96.46.25,17	B.
	(c) Polaris R.	4.17,2	17,1	15,7	16,7	17,1	19,9	12,003		238.8.38,48	29,330	46,0	47,9	1.30.59,24	B.
	(c) Polaris	2.43,1	41,9	42,0	43,0	44,1	45,1			345.37.44,79				1.30.59,43	B.
	Venus S.L.	1.34,9	35,9	32,9	34,0	36,1	35,9			67.16.35,07				83.11.29,97	B.
	Venus N.L. ....	...	...	...	...	...	...	10,936		67.16.20,65				83.11.15,55	B.
	Capella R.	0.21,9	22,0	20,0	21,1	22,6	23,1	9,799		195.30.31,09	29,300	44,2	40,0	44.9.55,25	B.
	Capella	0.51,7	51,9	50,1	49,6	51,6	51,1			28.15.51,07				44.9.54,33	B.
	) N.L.	3.35,9	36,0	34,9	32,4	35,9	37,9	6,438	-2	62.45.1,58	29,276	41,6	38,6	78.39.48,84	B.
	(d) N.L. ....	...	...	...	...	...	...	6,275	-1	62.45.1,62				78.39.48,88	B.
	) N.L. ....	...	...	...	...	...	...	6,086		62.45.2,42				78.39.49,68	B.
	) N.L. ....	...	...	...	...	...	...	5,950	+1	62.45.2,15				78.39.49,41	B.
	) N.L. ....	...	...	...	...	...	...	5,831	+2	62.45.1,49				78.39.48,75	B.
	π Leonis	2.60,2	60,7	59,9	58,0	60,0	62,0			65.18.0,37		41,7	38,7	81.12.52,34	B.
	(e) λ Ursæ Majoris R.	2.12,4	12,1	10,5	11,0	12,0	14,3	11,591		193.21.44,15				46.18.44,43	B.
	(f) λ Ursæ Majoris...	4.41,2	38,8	40,1	35,9	38,8	41,9		+1	30.24.39,97				46.18.45,47	B.
Mar. 5	(g) \odot N.L.	2.45,3	43,7	45,0	44,0	43,2	46,5	13,048		79.41.46,39	29,750	38,8	37,6	95.37.17,40	B.
	(h) \odot S.L.	3.59,9	58,8	60,0	58,7	58,1	60,9			80.13.59,70				96.9.32,68	B.
	ϵ Aurigæ R.	0.5,8	5,7	5,9	5,9	6,1	6,8	8,280		193.15.46,95	29,726	38,3	34,3	46.24.41,95	B.
	ϵ Aurigæ	0.37,6	34,9	36,1	35,0	35,1	37,4		+1 $\frac{1}{2}$	30.30.36,39				46.24.42,21	B.
	Capella R.	0.39,6	38,1	39,8	40,0	38,3	40,0	10,501		195.30.33,99				44.9.52,52	B.
	Capella	0.52,2	51,0	51,9	50,9	51,0	52,1		+1 $\frac{1}{2}$	52.15.51,93				44.9.55,36	B.
	B. v. 303.	3.57,8	55,0	56,9	56,0	56,9	58,1		+2	70.13.57,12				86.9.1,08	B.
	B. v. 623.	0.60,4	59,0	60,1	58,2	58,8	60,3			68.0.59,55				83.55.58,50	B.
	(i) B. v. 802.	1.42,4	41,4	40,9	40,2	41,1	41,9		+3	66.51.41,62				82.46.38,12	B.
	B. v. 925.	4.2,9	2,0	2,8	0,0	1,0	1,1			66.44.1,93	29,728	37,2	31,8	82.38.58,48	B.
	B. v. 1015.	1.13,9	12,9	13,4	13,1	12,1	13,1		+1 $\frac{1}{4}$	66.11.13,21				82.6.8,63	B.
	β Aurigæ R.	0.3,9	6,0	4,8	5,0	5,7	5,1	7,502		194.36.2,22				45.4.25,30	B.
	β Aurigæ	0.22,9	19,6	22,2	19,1	20,0	22,8			29.10.21,13				45.4.25,57	B.
	1 Lyncis R.	3.26,0	27,1	26,0	26,2	25,8	28,2	9,460		211.13.43,16	29,722	37,1	31,4	28.26.26,75	B.
	1 Lyncis	2.41,9	38,9	41,9	39,0	41,0	41,0		+1 $\frac{1}{2}$	12.32.41,45				28.26.28,28	B.
	23 Lyncis R.	1.32,9	34,5	32,0	32,9	32,9	34,9	11,407		207.6.9,24	29,710	35,8	30,5	32.34.5,07	B.
	23 Lyncis	0.15,8	16,0	16,1	14,9	14,1	16,0		+1 $\frac{3}{4}$	16.40.16,22				32.34.7,45	B.
	(k) Regulus R.	4.34,9	34,9	35,4	34,8	33,8	37,9	10,489		162.24.30,53	29,688	34,9	28,5	77.16.39,12	B.
	Regulus	1.51,8	49,7	50,9	48,8	49,4	51,9		+3	61.21.50,85				77.16.37,42	B.
	ϵ Leonis	3.33,7	33,0	32,9	32,1	31,1	34,2			76.13.33,10	29,674	33,9	27,3	92.8.54,20	B.
	β Virginis	1.34,1	33,6	33,8	32,8	33,8	34,9			71.26.33,95	29,672	33,9	27,1	97.21.41,78	B.
	) S.L.	0.22,4	22,2	22,9	24,4	20,2	23,6	11,300	-2	80.15.8,11	29,668	33,7	26,9	86.10.43,11	B.
	) S.L. ....	...	...	...	...	...	...	11,081	-1	80.15.8,90				96.10.43,90	B.
	) S.L. ....	...	...	...	...	...	...	10,889		80.15.9,22				96.10.44,22	B.
	) S.L. ....	...	...	...	...	...	...	10,728	+1	80.15.8,83				96.10.43,83	B.
	) S.L. ....	...	...	...	...	...	...	10,488	+2	80.15.9,97				96.10.44,97	B.
	η Virginis	4.57,2	56,8	59,9	56,2	55,0	58,9			82.39.57,72	29,660	32,9	26,0	98.35.42,79	B.
	(l) Σ 1727.	3.23,0	22,1	23,1	22,1	19,0	26,1	8,430	+3	41.54.2,13	29,656		26,5	57.48.20,99	B.
	Mercury, centre...	3.4,9	3,8	6,0	2,1	3,0	4,9			89.53.4,35	29,700	36,7	36,8	105.49.27,35	B.
Mar. 6	B. v. 356.	4.55,1	54,9	56,0	53,3	54,9	57,0			68.54.55,58	29,806	38,0	36,2	84.49.56,43	B.
	15 Lyncis R.	2.15,8	16,0	15,0	14,8	15,0	17,0	9,681		208.17.27,51	29,830	37,2	36,0	31.22.45,59	B.
	15 Lyncis	3.56,0	55,1	57,7	54,1	56,0	57,1			15.28.56,30				31.22.46,32	B.
	37 Ursæ Majoris R.	3.21,0	21,1	20,0	18,9	20,8	22,1	11,040	+1 $\frac{3}{4}$	207.33.3,96	29,898	36,0	33,0	32.7.9,87	B.
	(m) 37 Ursæ Majoris...	3.18,0	17,9	18,0	16,1	16,2	19,0		+3	16.13.19,93				32.7.10,68	B.
	ω Ursæ Majoris R.	1.16,9	17,8	17,2	17,0	16,0	19,5	10,062		193.41.21,29	29,912	35,8	33,3	45.59.7,23	B.
	(n) ω Ursæ Majoris...	4.62,0	60,2	62,0	59,8	59,9	60,9		+1 $\frac{1}{2}$	30.5.1,13				45.59.6,57	B.
	ψ Ursæ Majoris R.	1.23,0	23,7	22,8	22,3	21,9	24,8	11,927		195.0.48,11				44.39.38,99	B.
	ψ Ursæ Majoris...	0.34,1	33,4	33,6	32,9	32,0	34,0		+1 $\frac{1}{2}$	28.45.33,72				44.39.37,74	B.
	(k) δ Crateris R.	2.24,9	24,1	23,0	21,9	22,9	25,0	13,671	+1	135.46.12,72	29,914	35,5	33,7	103.56.22,57	B.
	δ Crateris	0.11,0	10,2	11,8	10,1	9,9	10,9		+3	88.0.10,34				103.56.22,55	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',222, 10',230, 10',244, 10',257, 10',265 at the five wires. ONE REVOLUTION = 20",838. CORRECTION for RUNS = + 2",3. ZENITH POINT = 21°.53'.11",54. ASSUMED CO-LATITUDE = 37°.47'.8",28.

(a) Faint from clouds. (b) Excessively cloudy. (c) Clouds passing. Times by M, 0^h.56^m.57^s and 0^h.58^m.41^s. M fast on H, 1^m.29^s.
 (d) Hurried. The first two micrometer readings have been increased 2", and the third, 1". (e) Faint. (f) Cloudy. (g) Without the dark glass.
 (h) Scarcely visible. (i) Doubtful from faintness. (k) Indefinite image. (l) Very faint: bisection doubtful. (m) Hurried.
 (n) No correction for Runs.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Mar. 6	<i>q</i> Virginis.....	4.57,7	57,1	59,9	56,0	56,7	58,9			82.39.58,10	29,920	34,4	31,8	98.35.42,77	B.
	ψ Virginis.....	0.57,0	56,0	58,1	56,1	56,1	57,1			82.45.56,80	29,916	34,1	31,7	98.41.41,91	B.
	(a) S.L.....	4.13,8	13,0	14,6	11,9	11,0	14,1	12,320	-2	85.53.37,00				101.49.37,42	B.
	S.L.....	...	...	...	...	...	...	12,230	-1	85.53.35,41				101.49.35,83	B.
	S.L.....	...	...	...	...	...	...	12,020		85.53.36,36				101.49.36,78	B.
	S.L.....	...	...	...	...	...	...	11,851	+1	85.53.36,40				101.49.36,82	B.
	S.L.....	...	...	...	...	...	...	11,810	+2	85.53.33,61				101.49.34,03	B.
Mar. 7	(b) ⊙ N.L.....	0.10,9	13,0	12,0	12,1	12,0	11,8	10,140		78.55.13,88	30,068	38,9	39,5	94.50.42,74	B.
Mar. 8	(c) ⊙ S.L.....	4.25,8	25,0	26,0	25,0	26,0	26,9	11,212		79.4.5,68	30,212	39,9	41,2	94.59.35,17	B.
	⊙ N.L.....	1.50,9	51,0	50,1	50,9	52,0	52,2			78.31.51,32				94.27.18,94	B.
Mar. 9	(d) ⊙ N.L.....	3.7,5	8,3	6,4	6,1	8,4	7,3	9,208		78.8.28,37	29,850	50,5	53,0	94.3.51,47	B.
	B. v. 303.....	4.8,0	7,1	6,8	5,0	9,1	9,9	10,691	+3	70.13.58,38	29,886	48,8	48,1	86.9.0,79	B.
	B. v. 1015.....	1.14,0	14,8	12,2	12,0	15,1	15,0			66.11.13,73				82.6.7,50	B.
	H. C. 11457.....	0.48,3	49,1	47,8	45,9	50,1	48,0			64.55.48,13	29,884	47,0	46,9	80.50.39,58	B.
Mar. 11	(e) S.L.....	4.52,5	51,1	52,4	50,2	51,0	53,2	11,200	-2	97.34.28,35	29,362	39,8	36,1	113.32.12,15	B.
	S.L.....	...	...	...	...	...	...	11,300	-1	97.34.27,63				113.32.11,43	B.
	S.L.....	...	...	...	...	...	...	11,333		97.34.28,32				113.32.12,12	B.
	S.L.....	...	...	...	...	...	...	11,370	+1	97.34.28,77				113.32.11,57	B.
	(f) α Lyrae R.....	3.24,9	23,7	24,9	22,8	25,1	28,0	9,066	+2 1/4	188.18.48,75		39,2	37,0	51.21.45,27	B.
	α Lyrae.....	2.31,1	31,1	30,1	28,0	29,1	32,4		+4 1/2	35.27.32,50				51.21.43,44	B.
Mar. 12	(g) ⊙ S.L.....	0.5,1	5,1	5,1	5,0	5,0	5,0		+3	77.30.5,77	29,356	42,7	42,9	93.25.27,18	B.
	H. C. 11457.....	0.48,9	47,9	49,2	46,8	47,0	49,8		+1 1/2	64.55.48,25	29,516	40,1	36,0	80.50.40,27	B.
	(h) γ Geminorum R...	2.17,0	16,1	18,7	15,1	17,1	19,9	9,450		166.12.33,40	29,540	38,5	36,3	73.28.28,94	B.
	γ Geminorum.....	3.50,9	48,0	49,3	46,8	48,9	52,1		+1 3/4	57.33.49,12				73.28.28,38	B.
	15 Lyncis R.....	2.16,2	15,8	15,6	13,9	15,1	17,1	9,650		208.17.27,53	29,546	38,6	36,5	31.22.45,64	B.
	15 Lyncis.....	3.56,9	55,0	56,1	54,1	55,6	57,9			15.28.55,58				31.22.45,67	B.
	(h) ζ Geminorum R...	3.58,1	56,9	59,9	57,9	57,9	60,3	11,742	+2 1/4	170.28.26,82				69.12.29,17	B.
	ζ Geminorum.....	2.56,0	54,0	55,0	52,0	55,0	56,9		+4 1/2	53.17.55,71				69.12.28,62	B.
	(i) Σ 1033.....	2.52,9	50,0	52,6	49,7	50,4	52,4			21.17.51,08				37.11.41,74	G.
	(i) Σ 1037.....	1.40,7	38,1	39,0	37,0	38,4	40,1		+3	46.36.39,44				62.31.3,45	G.
Mar. 13	(k) Venus N.L.....	1.20,2	21,0	18,1	18,2	20,9	21,1			61.51.19,80	29,878	41,7	44,2	77.46.5,91	B.
	Venus S.L.....	...	...	...	...	...	...	9,550		61.51.33,99				77.46.20,10	B.
	(l) Σ 1426.....	2.35,0	32,9	32,4	31,6	32,0	35,5			66.52.33,02	29,876	39,6	34,2	82.47.29,86	G.
	(m) Σ 1439. np.....	4.42,8	39,1	40,7	39,1	39,0	41,9			52.29.40,02				68.24.12,36	G.
	(n) Σ 1457.....	2.45,5	44,1	44,1	42,2	42,4	45,9			67.32.43,78				83.27.42,04	G.
	ψ Ursæ Majoris R.	1.26,1	24,1	23,9	23,1	25,1	25,8	11,896		195.0.49,86	29,880	38,1	34,6	44.39.37,21	B.
	ψ Ursæ Majoris...	0.34,9	32,0	31,0	32,0	31,0	34,0		+1	28.45.32,59				44.39.36,58	B.
	(o) δ Crateris R.....	2.20,1	18,6	18,6	17,9	18,4	20,7	13,590	+1	135.46.9,17	29,882	38,1	33,9	103.56.25,90	B.
	δ Crateris.....	0.15,2	11,1	13,0	10,7	11,0	13,0		+3	88.0.11,99				103.56.23,98	B.
	γ Ursæ Majoris R.	4.27,8	25,1	26,0	25,9	26,0	28,5	12,231		204.13.44,47		37,9	33,7	35.26.28,88	B.
	γ Ursæ Majoris...	2.39,3	37,1	38,1	36,0	38,2	39,2		+1 1/2	19.32.38,23				35.26.32,50	B.
	ο Virginis R.....	1.21,9	20,8	20,9	21,9	20,9	22,9	8,572		159.16.56,00				80.24.19,20	B.
	ο Virginis.....	4.30,1	28,1	29,8	26,9	28,6	31,4		+1	64.29.28,78				80.24.20,90	B.
	(o) δ Ursæ Majoris R.	4.25,2	25,2	24,0	24,0	24,2	26,0	11,636	+3 1/4	207.33.55,07	29,878	37,5	33,6	32.6.18,76	B.
	δ Ursæ Majoris...	2.28,9	26,4	27,1	24,1	25,9	28,2		+1 3/4	16.12.27,29				32.6.18,04	B.
	Σ 1633. nf.....	0.22,9	19,2	20,3	19,1	20,2	23,0			46.10.20,75				62.4.44,68	B.
Mar. 18	⊙ S.L.....	3.20,9	23,8	20,7	20,6	20,2	23,1	10,880		75.8.8,38	29,992	39,9	41,0	91.3.24,73	B.
	⊙ N.L.....	0.57,3	59,9	58,0	58,1	58,9	58,6			74.35.58,53				90.31.13,35	B.
Mar. 19	(p) ⊙ N.L.....	2.16,9	17,1	17,0	15,9	17,1	18,3		+2	74.12.17,74	29,990	41,1	45,2	90.7.30,79	B.
	⊙ S.L.....	4.23,7	24,0	23,9	21,2	23,0	25,0		+3	74.44.24,56				90.39.39,10	B.
Mar. 20	Venus S.L.....	1.9,8	9,0	9,2	7,5	11,1	9,9		+1	58.41.9,83	29,460	41,9	40,6	74.35.50,36	B.
	Venus N.L.....	...	...	...	...	...	...	11,011	+1	58.40.53,91				74.35.34,44	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',222, 10',230, 10',244, 10',257, 10',265 at the five wires. From March 7 = 10',209, 10',217, 10',231, 10',244, 10',252. From March 18 = 10',213, 10',223, 10',237, 10',247, 10',257. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = + 2'',3. From March 9 = - 2'',7. From March 18 = + 2'',0. ZENITH POINT = 21°.53'.11'',54. ASSUMED CO-LATITUDE = 37°.47'.8'',28.

(a) Very cloudy. The first two and last two micrometer readings have been diminished 1'. (b) Very cloudy. (c) Great waving.
 (d) S.L. lost by wrong setting. (e) Scarcely full: not good. (f) Too much wind. (g) Very cloudy. N.L. lost by wrong setting.
 (h) Indefinite image. (i) Not seen double: no others near. (k) Unsteady. (l) Faint companion seen. (m) Very close. (n) Seen double, but observed as single. (o) Mercury waving. (p) Much clouded. N.L. accidentally on fixed wire.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	°	°	°	
Mar. 20	γ Geminorum R...	2. 48,9	48,0	49,4	49,0	50,3	50,1	11,018		166. 12. 33,19	29,642	38,8	34,2	73. 28. 29,48	B.
	γ Geminorum....	3. 49,1	47,2	48,3	45,8	50,1	49,1		+1½	57. 33. 48,62				73. 28. 28,21	B.
	ο Virginis R.....	1. 16,8	15,0	15,9	16,2	16,1	17,2	8,269		159. 16. 57,29	29,790	36,1	30,4	80. 24. 18,12	B.
	ο Virginis.....	4. 26,9	26,1	26,8	24,1	26,1	27,9		+1½	64. 29. 26,68				80. 24. 19,01	B.
	δ Ursæ Majoris R.	4. 22,9	22,7	20,9	19,6	22,1	23,9	11,340		207. 33. 59,34	29,792	35,9	30,5	32. 6. 14,46	B.
	δ Ursæ Majoris...	2. 26,0	23,2	23,4	21,0	24,3	24,2			16. 12. 23,85				32. 6. 14,57	B.
	Mercury, centre..	4. 19,9	17,8	19,1	16,9	18,3	19,2			82. 9. 18,82	29,948	39,7	41,4	98. 4. 59,26	B.
Mar. 21	(a) ☉ N.L.....	0. 34,1	35,1	34,2	34,9	34,7	35,9	12,061		73. 24. 56,84	29,948	40,5	42,2	89. 20. 8,12	B.
	☉ S.L.....	2. 1,1	1,1	1,9	0,1	1,3	1,0		+2	73. 57. 1,76				89. 52. 14,48	B.
	Venus N.L.....	0. 4,1	2,0	2,8	2,1	4,9	3,0		+1½	58. 15. 3,71	29,928	42,1	44,5	74. 9. 43,88	B.
	Venus S.L.....	...	...	...	...	...	...	9,554	+1½	58. 15. 18,26				74. 9. 58,43	B.
	(b) Σ 1318. sf.....	3. 26,2	23,4	25,0	23,7	24,1	26,8			26. 28. 25,10	29,850	37,6	35,0	42. 22. 26,66	G.
Mar. 22	(c) ☉ S.L.....	3. 24,7	24,0	23,2	22,2	24,0	25,4		-1	73. 33. 23,88	29,580	45,6	48,4	89. 28. 33,66	B.
Mar. 23	(d) δ Geminorum R..	1. 16,7	15,9	16,0	16,0	17,9	17,8	9,153	+2	171. 56. 39,47	29,550	42,8	40,1	67. 44. 14,21	B.
	δ Geminorum....	4. 41,2	40,2	41,8	38,9	43,1	43,5		+4½	51. 49. 43,02				67. 44. 13,62	B.
	(e) β Cancri R.....	0. 43,3	43,8	44,2	43,1	45,0	46,2		+2	159. 20. 44,22		42,7	37,5	80. 20. 29,80	B.
	β Cancri.....	0. 38,1	36,9	36,1	35,9	38,1	39,1		+4½	64. 25. 37,92				80. 20. 28,86	B.
	(f) γ Ursæ Majoris R.	4. 35,6	36,1	33,0	34,8	35,1	37,0	12,339	+2½	204. 13. 50,86	29,532	38,1	34,0	35. 26. 26,52	B.
	γ Ursæ Majoris...	2. 37,1	34,8	34,9	33,1	36,0	36,0		+4½	19. 32. 39,76				35. 26. 34,06	B.
	(g) Σ 1606.....	0. 31,0	28,0	28,8	26,9	28,9	31,1			33. 20. 29,15				49. 14. 37,95	B.
Mar. 25	λ Draconis R.....	2. 18,1	18,1	14,2	16,4	18,9	18,1	13,055		219. 51. 18,35	29,372	45,2	45,6	19. 48. 42,73	B.
	λ Draconis.....	0. 7,8	5,8	7,0	5,8	8,1	7,8			3. 55. 7,05				19. 48. 45,05	B.
	B.A.C. 4006.....	2. 52,6	51,8	50,2	50,5	53,9	52,1			78. 32. 51,72				94. 28. 16,08	B.
	(f) ο Virginis R.....	1. 45,1	46,1	45,9	46,5	48,0	47,0	9,899		159. 16. 53,29	29,364	45,3	45,6	80. 24. 19,62	B.
	ο Virginis.....	4. 29,1	29,8	27,9	26,9	30,0	31,0		+2½	64. 29. 29,04				80. 24. 18,87	B.
	(h) Mercury, centre..	3. 39,4	40,1	37,7	38,0	42,0	39,0		-2	78. 33. 38,07	29,624	49,2	51,5	94. 29. 2,15	B.
Mar. 26	(h) Venus S.L.....	1. 45,1	46,1	43,8	44,1	48,4	46,0		+3	56. 11. 46,80	29,680	51,9	55,5	72. 6. 22,57	B.
	Venus N.L.....	...	...	...	...	...	...	11,039	+3	56. 11. 30,60				72. 6. 6,37	B.
	☉ S.L.....	2. 18,0	19,0	15,0	17,0	20,1	19,0	11,639	-2	52. 36. 50,07	29,714	50,8	51,6	68. 31. 21,12	B.
	☉ S.L.....	...	...	...	...	...	...	11,540	-1	52. 36. 51,29				68. 31. 22,34	B.
	☉ S.L.....	...	...	...	...	...	...	11,540		52. 36. 50,64				68. 31. 21,69	B.
	☉ S.L.....	...	...	...	...	...	...	11,510	+1	52. 36. 50,65				68. 31. 21,70	B.
	☉ S.L.....	...	...	...	...	...	...	11,463	+2	52. 36. 51,14				68. 31. 22,19	B.
	μ Geminorum....	0. 15,9	18,0	14,1	14,9	18,1	16,3			51. 30. 16,20				67. 24. 45,76	B.
	(i) γ Geminorum R..	2. 15,0	15,2	15,0	15,1	16,1	17,0	9,484		166. 12. 31,04	29,720	50,0	50,3	73. 28. 30,34	B.
	γ Geminorum....	3. 49,3	51,2	48,2	48,0	52,9	50,4		+1½	57. 33. 49,92				73. 28. 28,22	B.
	Procyon R.....	2. 10,9	11,9	9,9	11,0	12,9	13,0	6,877		155. 18. 21,38	29,730	48,8	49,0	84. 22. 59,74	B.
	Procyon.....	2. 57,9	60,9	57,1	58,2	62,0	61,0		+2	68. 27. 59,43				84. 22. 57,47	B.
	Σ 1633. np.....	0. 20,7	20,2	17,4	18,0	20,9	21,0		+3	46. 10. 20,40				62. 4. 43,60	B.
	(k) ε Ursæ Majoris R.	4. 11,1	10,1	8,5	8,9	12,1	11,0	12,372		206. 28. 25,48	29,776	45,5	43,8	33. 11. 49,62	B.
Mar. 27	ε Ursæ Majoris...	2. 56,9	56,9	55,8	54,2	57,1	56,8		+2	17. 17. 57,05				33. 11. 49,07	B.
	(l) Polaris SP. R....	1. 49,9	49,1	46,0	48,0	50,0	49,8	13,661		241. 10. 39,41	29,772	46,1	43,8	-1. 31. 7,66	B.
	(l) Polaris SP.....	0. 46,4	45,8	44,1	44,9	46,9	45,4			342. 35. 42,76				-1. 31. 8,57	B.
	(m) Mercury, centre..	4. 28,9	27,8	27,2	25,0	28,9	27,8			76. 59. 27,38	30,302	50,0	52,3	92. 54. 48,22	B.
Mar. 28	(n) ☉ S.L.....	2. 36,9	39,1	34,9	36,5	39,0	36,9	11,309		71. 12. 14,63	30,314	50,9	53,4	87. 7. 19,54	B.
	☉ N.L.....	0. 9,9	11,0	8,9	9,9	12,0	8,9			70. 40. 10,10				86. 35. 13,75	B.
	Venus S.L.....	0. 16,3	18,0	13,3	14,9	18,9	16,0			55. 25. 16,22	30,350	53,1	56,3	71. 19. 51,66	B.
	Venus N.L.....	...	...	...	...	...	...	11,042		55. 24. 59,34				71. 19. 34,78	B.
	δ Geminorum R..	1. 23,9	25,2	21,9	21,1	25,9	25,9	9,540		171. 56. 38,34	30,380	51,0	49,0	67. 44. 15,66	B.
	δ Geminorum....	4. 41,4	44,9	40,2	40,2	43,9	44,1		+1¼	51. 49. 42,31				67. 44. 13,23	B.
	k Geminorum....	1. 2,2	4,1	0,2	1,1	3,0	1,8			57. 56. 2,02				73. 50. 41,93	B.
	☉ N.L.....	0. 58,1	59,9	55,7	55,9	58,9	58,8	13,881	-2	56. 44. 46,35	30,390	50,5	47,0	72. 39. 24,60	B.
	☉ N.L.....	...	...	...	...	...	...	13,770	-1	56. 44. 46,30				72. 39. 24,55	B.
	☉ N.L.....	...	...	...	...	...	...	13,648		56. 44. 46,64				72. 39. 24,89	B.
	☉ N.L.....	...	...	...	...	...	...	13,500	+1	56. 44. 47,56				72. 39. 25,81	B.
	☉ N.L.....	...	...	...	...	...	...	13,380	+2	56. 44. 47,98				72. 39. 26,23	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',213, 10',223, 10',237, 10',247, 10',257 at the five wires. From March 23 = 10',208, 10',218, 10',232, 10',242, 10',252. ONE REVOLUTION = 20',838. CORRECTION for RUNS = + 2'',0. From March 25 = - 1'',5. ZENITH POINT = 21°. 53'. 11'',54. ASSUMED CO-LATITUDE 37°. 47'. 8'',28.

(a) Very cloudy: S.L. scarcely seen. (b) Hazy. (c) Accidentally on the fixed wire: N.L. hid by clouds. (d) The micrometer reading was 11,153. (e) Came on the fixed wire. Mercury unsteady. (f) Badly defined image. (g) Not seen double. (h) Cloudy. (i) Faint. (k) Indefinite image. (l) Times by M, 13^h. 8^m. 29^s and 13^h. 9^m. 22^s. M fast on 11, 13^h. (m) Unsteady. (n) Great waving.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle Reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.	
		A	B	C	D	E	F					Int.	Ext.			
		"	"	"	"	"	"					"	"	"		"
Mar. 28	θ Cancri.....	3. 30,6	31,9	27,9	28,1	31,1	32,6	12,511	+1¼	55. 28. 30,18	30,402	50,1	45,4	71. 23. 6,64	B.	
	δ Cancri.....	2. 8,6	10,1	7,1	7,1	9,9	9,9			55. 22. 8,68				71. 16. 44,98	B.	
	α Hydræ R.....	3. 23,9	24,9	22,1	22,2	25,9	26,0			141. 42. 36,50	30,414	49,7	45,2	97. 59. 27,41	B.	
	α Hydræ.....	3. 46,0	48,0	44,3	45,1	46,1	47,1			82. 3. 45,89				97. 59. 26,72	B.	
	ε Leonis R.....	4. 19,9	18,9	17,9	17,9	20,8	22,1	8,256	+3	174. 10. 0,55	30,408	49,0	43,1	65. 30. 50,86	B.	
	ε Leonis.....	1. 19,9	20,1	16,0	17,0	19,9	19,8			49. 36. 19,33				65. 30. 47,66	B.	
	37 Ursæ Majoris R.	3. 23,1	25,3	20,0	22,8	23,0	26,0	10,959	+2	207. 33. 7,50	30,410	47,1	41,3	32. 7. 6,33	B.	
	37 Ursæ Majoris..	3. 12,1	12,0	10,9	8,9	12,1	12,9			16. 13. 13,47				32. 7. 4,22	B.	
	(a) ω Ursæ Majoris R.	1. 21,8	23,9	20,0	21,8	23,0	24,1	10,118	+1½	193. 41. 24,74	30,420	46,9	42,0	45. 59. 3,76	B.	
	(b) ω Ursæ Majoris..	4. 57,6	55,9	54,1	54,1	56,1	56,9			30. 4. 56,10				45. 59. 1,52	B.	
	ψ Ursæ Majoris R.	1. 17,0	17,2	14,9	16,1	16,7	18,1	11,351	+1	195. 0. 53,28				44. 39. 33,81	B.	
	ψ Ursæ Majoris..	0. 29,9	30,1	26,2	27,8	29,0	30,1			28. 45. 28,98				44. 39. 32,99	B.	
	Σ 1582.....	4. 44,1	42,4	41,5	40,0	43,1	45,2	+1		51. 14. 42,48	30,414	46,3	39,8	67. 9. 13,27	B.	
	(c) Σ 1606.....	0. 29,3	27,0	26,0	24,9	27,1	29,1			33. 20. 27,20				49. 14. 36,21	B.	
	Σ 1633. np.....	0. 19,1	16,3	17,0	16,0	17,1	20,1			46. 10. 17,66				62. 4. 41,72	B.	
	(d) Σ 1661.....	4. 24,9	23,0	23,0	20,1	23,4	26,0			61. 49. 23,18				77. 44. 10,58	B.	
	Σ 1690.....	0. 52,1	52,3	51,0	50,0	52,1	53,0	11,831		78. 5. 51,70	30,420	44,1	37,9	94. 1. 19,08	B.	
	Polaris SP. R.	1. 13,1	13,5	11,1	12,9	12,9	15,9			241. 10. 39,95				-1. 31. 9,85	B.	
	Polaris SP.....	0. 47,3	44,1	45,0	45,1	46,0	47,2			342. 35. 45,52				-1. 31. 7,46	B.	
(f) Mercury, centre..	0. 46,0	47,1	44,1	45,4	45,1	43,9	76. 10. 45,30			30,478	51,6	55,5	92. 6. 3,61	B.		
Mar. 29	⊙ N.L.....	3. 3,8	4,0	2,9	3,7	3,9	4,1	13,840	+3	70. 16. 48,73	30,470	50,8	56,2	86. 11. 51,43	B.	
	⊙ S.L.....	3. 52,9	53,0	50,2	51,9	52,1	52,8	70. 48. 52,32					86. 43. 56,27	B.		
	(g) Polaris R.....	4. 18,7	16,1	14,0	13,9	15,6	17,8	12,459			238. 8. 29,80	30,456	50,6	57,2	1. 31. 7,13	B.
	Polaris.....	2. 55,8	55,9	55,2	53,9	58,0	54,9				345. 37. 56,01				1. 31. 9,86	B.
	Venus N.L.....	2. 24,9	28,9	20,7	25,1	26,2	25,9	9,438	+3	55. 2. 25,38	30,438	51,0	59,5	70. 57. 0,13	B.	
	Venus S.L.....	...	...	...	...	...	...			55. 2. 41,98				70. 57. 16,73	B.
	β Tauri R.....	3. 21,9	20,0	18,9	20,2	19,1	23,9			178. 8. 55,80	30,426	50,9	57,7	61. 31. 49,70	B.	
	β Tauri.....	2. 24,0	24,1	20,0	21,8	24,9	24,1			45. 37. 23,98				61. 31. 46,40	B.	
	α Orionis R.....	2. 22,9	21,9	19,1	22,6	23,2	24,9	6,910	+1½	157. 3. 31,79				82. 37. 46,01	B.	
	α Orionis.....	2. 50,1	51,3	47,1	48,0	50,8	49,0			66. 42. 49,54				82. 37. 44,28	B.	
	γ Geminorum R....	2. 11,2	13,1	9,8	13,1	12,7	13,2	9,270	+1½	166. 12. 32,36	30,426	51,3	53,5	73. 28. 29,72	B.	
	γ Geminorum.....	3. 49,1	48,9	46,9	45,8	51,0	48,9			57. 33. 48,70				73. 28. 27,70	B.	
	δ Cancri.....	2. 8,2	8,1	6,4	6,1	8,0	9,1			55. 22. 7,73	30,434	49,9	44,6	71. 16. 44,14	B.	
	) N.L.....	3. 15,5	17,0	14,9	15,0	17,1	18,0	8,051	-2	60. 39. 7,62	30,436	49,7	44,5	76. 33. 52,52	B.
	) N.L.....	...	...	...	...	...	...			60. 39. 7,84				76. 33. 52,74	B.
	) N.L.....	...	...	...	...	...	...			60. 39. 6,88				76. 33. 51,78	B.
	) N.L.....	...	...	...	...	...	...			60. 39. 8,69				76. 33. 53,59	B.
	) N.L.....	...	...	...	...	...	...	7,395	+2	60. 39. 10,01				76. 33. 54,91	B.
	κ Cancri.....	2. 53,6	51,8	50,0	49,9	52,7	53,1			62. 47. 51,97				78. 42. 40,67	B.	
	ξ Leonis.....	1. 11,1	9,1	7,9	8,4	9,2	11,0	10,851	+3¼	62. 6. 9,50	30,436	48,8	43,3	78. 0. 57,07	B.	
	(h) γ Virginis R.....	0. 60,8	60,3	60,2	58,9	60,1	60,9			149. 5. 47,52	30,410	43,6	36,0	90. 35. 52,52	B.	
	γ Virginis.....	0. 36,4	33,8	34,0	33,8	33,6	37,0			74. 40. 34,79				90. 35. 51,75	B.	
	(h) ε Ursæ Majoris R.	4. 5,9	3,9	3,2	3,9	3,9	7,0	12,058	+1	206. 28. 26,79	30,408	43,0	35,6	33. 11. 48,13	B.	
	ε Ursæ Majoris....	2. 58,1	55,1	56,0	55,0	55,0	58,0			17. 17. 56,56				33. 11. 48,40	B.	
	Mercury, centre..	1. 4,2	4,9	2,1	2,9	3,7	3,2			75. 21. 3,55	30,366	49,7	51,4	91. 16. 19,80	B.	
Mar. 30	(i) ⊙ S.L.....	1. 10,7	9,9	8,9	10,0	9,4	11,2	11,791	+1	70. 25. 37,62	30,360	49,9	52,8	86. 20. 40,88	B.	
	(i) ⊙ N.L.....	3. 34,9	33,0	30,9	32,2	33,7	35,1	69. 53. 33,73					85. 48. 35,76	B.		
	(k) Venus S.L.....	0. 36,0	35,0	30,7	33,6	35,2	34,2	54. 40. 34,13		30,332	51,4	53,8	70. 35. 8,66	B.		
	(h) γ Geminorum R..	2. 21,1	21,1	20,0	21,0	21,1	22,4	166. 12. 31,27		30,310	50,0	48,4	73. 28. 31,09	B.		
	γ Geminorum.....	3. 49,8	48,4	47,3	47,1	49,1	49,5	12,009	+1½	57. 33. 49,61				73. 28. 28,89	B.	
	(l) α Hydræ R.....	3. 17,2	18,3	16,0	16,2	18,1	19,0			141. 42. 40,89	30,314	46,2	40,0	97. 59. 23,80	B.	
	α Hydræ.....	3. 44,2	43,2	43,0	42,4	43,0	44,9			82. 3. 43,49				97. 59. 25,10	B.	
	(m) ξ Leonis.....	1. 10,0	10,1	8,5	8,1	9,9	10,2			62. 6. 10,17				78. 0. 57,88	B.	
	(n)) N.L.....	1. 34,5	36,1	31,9	33,0	34,2	34,9	11,342	-2	65. 26. 17,76	30,318	45,6	38,8	81. 21. 11,95	B.	
	(m)) N.L.....	...	...	...	...	...	...			65. 26. 12,29				81. 21. 6,48	B.
	) N.L.....	...	...	...	...	...	...			65. 26. 13,37				81. 21. 7,56	B.
	) N.L.....	...	...	...	...	...	...			65. 26. 11,49				81. 21. 5,68	B.
	) N.L.....	...	...	...	...	...	...	10,970	+2	65. 26. 12,26				81. 21. 6,45	B.
	π Leonis.....	2. 57,9	58,9	56,8	56,1	57,1	57,9			65. 17. 57,58				81. 12. 51,49	B.	

MICROMETER READING for COINCIDENCE with Fixed Wire = $10^{\circ}208$, $10^{\circ}218$, $10^{\circ}232$, $10^{\circ}242$, $10^{\circ}252$ at the five wires. From March 29 = $10^{\circ}210$, $10^{\circ}220$, $10^{\circ}234$, $10^{\circ}244$, $10^{\circ}254$. ONE REVOLUTION = $20^{\circ}838$. CORRECTION for RUNS = $-1^{\circ}5$. From Mercury March 28 = $+1^{\circ}3$. ZENITH POINT = $21^{\circ}53'11''54$. ASSUMED CO-LATITUDE = $37^{\circ}47'8''28$.

(a) Too close to fixed wire. (b) No correction for Runs. (c) The observer thought the star appeared double. (d) Not seen double. (e) Times by Molyneux, $13^h.3^m.36^s$ and $13^h.4^m.14^s$. M fast on H, 18^s . (f) Extremely faint. (g) Unsteady and faint. Times by M, $1^h.2^m.57^s$ and $1^h.4^m.21^s$. M fast on H, 19^s . (h) Indistinct image. (i) Great waving. (k) Unsteady. Micrometer for N.L. not read. (l) Indefinite. Micrometer reading was $11^{\circ}009$. (m) Hurried. (n) This bisection does not accord with the others.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	"	"		
Mar. 30	(a) 37 Ursæ Majoris R.	3. 18,1	19,9	14,9	17,1	16,9	19,9	10,628	+3	207. 33. 8,22	30,312	44,3	37,2	32. 7. 5,58	B.
	37 Ursæ Majoris...	3. 11,6	10,6	10,2	7,7	9,3	12,0		+4 $\frac{1}{2}$	16. 13. 15,22				32. 7. 5,94	B.
	42 Leonis Min. R.	0. 31,8	33,0	29,9	31,9	32,2	34,0	9,993	+1 $\frac{1}{2}$	181. 10. 37,27				58. 30. 5,49	B.
	42 Leonis Minoris.	0. 44,0	43,0	41,2	40,0	41,9	43,0		+4 $\frac{1}{2}$	42. 35. 44,09				58. 30. 3,77	B.
	Σ 1719. s.	4. 37,5	38,1	36,5	35,2	35,1	39,7			72. 39. 37,22	30,276	40,7	35,0	88. 34. 48,42	B.
	(b) Σ 1742.	2. 11,3	10,1	10,0	9,9	8,0	11,1			71. 52. 10,17	30,268	40,1	34,7	87. 47. 19,34	B.
	m Virginis.	4. 23,2	21,9	22,8	21,1	19,9	24,3			81. 59. 22,38	30,264	39,9	34,6	97. 55. 4,71	B.
	(c) η Ursæ Majoris R.	1. 37,1	31,9	30,1	29,0	31,2	31,6	12,641	-1	199. 45. 41,74				39. 54. 40,34	B.
	η Ursæ Majoris...	0. 43,1	41,9	41,8	39,0	40,8	41,9		+2	24. 0. 42,17				39. 54. 41,17	B.
	(d) Mercury, centre . .	3. 44,0	42,1	41,8	40,9	42,9	43,5			73. 38. 42,70	30,190	48,7	50,9	89. 33. 52,97	B.
Apr. 1	(e) \odot N.L.	2. 5,1	4,9	3,8	4,8	3,9	5,0	9,710		69. 7. 15,59	30,192	49,0	51,2	85. 2. 14,86	B.
	(f) \odot S.L.	4. 7,1	7,9	6,9	5,9	6,0	7,2	9,710	2	69. 39. 18,52				85. 34. 18,52	B.
	Polaris R.	4. 22,8	22,1	19,0	21,0	20,0	23,0	12,751		238. 8. 28,81	30,188	49,9	55,0	1. 31. 9,19	B.
	(g) Polaris.	2. 57,0	54,2	55,9	56,0	57,2	58,0			345. 37. 57,02				1. 31. 10,18	B.
	Venus N.L.	2. 26,8	29,0	22,0	26,1	27,9	28,9			53. 57. 26,88	30,156	50,2	60,7	69. 51. 58,78	B.
	Venus S.L. ....	...	...	...	...	...	...	9,389		53. 57. 44,48				69. 52. 16,38	B.
	β Cancri R.	0. 25,9	25,1	22,3	26,3	26,2	28,7	9,359		159. 20. 44,00	30,150	51,8	53,3	80. 20. 30,23	B.
	β Cancri.	0. 39,2	40,0	36,1	37,9	40,9	40,0		+1 $\frac{3}{4}$	61. 25. 39,13				80. 20. 28,52	B.
	) N.L.	2. 13,6	12,1	10,1	12,2	11,2	14,1	8,849	-2	76. 42. 48,68		49,0	44,3	92. 38. 8,74	B.
	) N.L. ....	...	...	...	...	...	...	8,674	-1	76. 42. 48,55				92. 38. 8,61	B.
	) N.L. ....	...	...	...	...	...	...	8,486		76. 42. 48,75				92. 38. 8,81	B.
	) N.L. ....	...	...	...	...	...	...	8,300	+1	76. 42. 48,81				92. 38. 8,87	B.
	) N.L. ....	...	...	...	...	...	...	8,133	+2	76. 42. 48,48				92. 38. 8,54	B.
	(h) χ Ursæ Majoris R.	4. 22,4	21,9	19,0	22,1	21,0	23,9	11,529	+2 $\frac{1}{4}$	198. 18. 54,50				41. 21. 29,91	B.
	χ Ursæ Majoris...	2. 29,0	27,8	25,9	25,9	27,0	29,9		+4 $\frac{1}{2}$	25. 27. 31,14				41. 21. 30,71	B.
	(c) δ Ursæ Majoris R.	4. 21,3	22,3	18,0	19,2	20,9	23,7	11,061		207. 34. 3,84		48,1	43,9	32. 6. 10,94	B.
	δ Ursæ Majoris...	2. 23,9	21,9	20,9	20,9	21,2	25,1		+1 $\frac{3}{4}$	16. 12. 23,16				32. 6. 13,10	B.
	(f) η Virginis.	3. 21,8	20,2	18,1	18,1	18,2	23,9	11,061		73. 53. 2,96				89. 48. 14,86	B.
	ϵ Ursæ Majoris R.	4. 11,1	10,8	9,2	9,3	10,9	13,1	12,248		206. 28. 28,95	30,146	47,4	43,5	33. 11. 46,97	B.
	ϵ Ursæ Majoris...	2. 56,9	54,9	53,8	53,9	54,0	56,9		1	17. 17. 55,43				33. 11. 46,51	B.
	(i) Polaris SP. R.	1. 17,0	15,8	12,0	15,0	14,1	18,1	11,969		241. 10. 39,42	30,144	46,7	42,2	-1. 31. 7,55	B.
	Polaris SP.	0. 45,9	43,1	42,7	43,1	43,2	45,9			342. 35. 43,51				-1. 31. 9,46	B.
Apr. 2	(k) \odot S.L.	1. 13,2	17,7	9,9	15,1	15,0	14,1			69. 16. 14,22	30,040	60,0	63,5	85. 11. 11,94	B.
	Polaris R.	4. 15,8	14,4	11,1	13,9	15,0	15,1	12,310		238. 8. 30,86	30,028	60,7	64,4	1. 31. 8,16	B.
	(l) Polaris.	2. 54,1	55,0	52,9	56,1	58,0	56,2			345. 37. 56,18				1. 31. 10,36	B.
	Venus S.L.	1. 61,2	62,5	57,0	62,9	63,6	61,9			53. 37. 1,60	29,976	63,7	66,5	69. 31. 32,40	B.
	Venus N.L. ....	...	...	...	...	...	...	10,984		53. 36. 45,97				69. 31. 16,77	B.
	β Aurigæ R.	0. 49,2	50,6	45,0	51,7	52,1	49,9	9,789		194. 35. 59,05	29,950	63,0	64,5	45. 4. 28,90	B.
	β Aurigæ.	0. 23,1	20,6	17,9	21,8	22,8	22,9		+1 $\frac{1}{2}$	29. 10. 21,87				45. 4. 24,98	B.
	(m) Σ 1322.	0. 54,0	50,5	48,0	50,4	51,2	52,9			56. 55. 51,20	29,906	54,6	50,2	72. 50. 27,92	G.
	\circ Virginis R.	1. 21,5	21,1	18,9	22,9	22,2	22,4	8,597		159. 16. 55,69	29,884	50,6	44,9	80. 24. 19,11	B.
	\circ Virginis.	4. 29,2	27,6	25,0	26,7	28,4	31,1			64. 29. 28,18				80. 24. 18,14	B.
	η Virginis.	3. 6,9	3,0	2,1	2,1	4,0	5,9			73. 53. 4,13				89. 48. 15,20	B.
	) S.L.	0. 29,0	25,8	23,4	26,9	27,1	26,3	7,940	-2	83. 6. 21,50	29,870	50,2		99. 2. 4,08	B.
	) S.L. ....	...	...	...	...	...	...	7,739	-1	83. 6. 22,04				99. 2. 4,62	B.
	) S.L. ....	...	...	...	...	...	...	7,527		83. 6. 22,85				99. 2. 5,43	B.
	) S.L. ....	...	...	...	...	...	...	7,351	+1	83. 6. 22,78				99. 2. 5,36	B.
	) S.L. ....	...	...	...	...	...	...	7,221	+2	83. 6. 21,71				99. 2. 4,29	B.
	θ Virginis.	2. 8,9	6,0	5,0	5,3	7,4	7,1			78. 47. 6,70	29,860	49,4	43,0	94. 42. 32,91	B.
	Spica.	0. 11,2	10,0	9,9	9,2	10,1	10,1			84. 25. 10,10	29,850	49,1	42,6	100. 20. 59,15	B.
	η Ursæ Majoris R.	1. 29,1	29,9	27,0	28,9	29,9	29,0	12,450		199. 45. 42,84		49,0	42,4	39. 54. 40,05	B.
	η Ursæ Majoris...	0. 42,8	40,5	39,0	40,0	40,3	41,1		+1 $\frac{1}{2}$	24. 0. 41,05				39. 54. 39,10	B.
	τ Virginis.	2. 4,9	4,0	0,9	2,9	2,2	3,9		+4 $\frac{1}{2}$	71. 47. 3,34				87. 42. 9,29	B.
Apr. 3	γ Bootis R.	0. 23,0	24,9	21,9	25,1	21,2	24,9	11,793		188. 39. 51,03	29,846	47,8	41,7	51. 0. 43,58	B.
	γ Bootis.	1. 32,6	31,3	30,0	31,0	30,1	33,5		+1 $\frac{1}{4}$	35. 6. 31,67				51. 0. 41,44	B.
	Mercury, centre...	2. 60,0	65,1	57,6	62,0	59,0	59,0			71. 53. 0,58	29,760	60,0	62,0	87. 48. 3,82	B.
Apr. 3	\odot N.L.	2. 14,0	12,0	10,9	15,0	13,9	14,1	12,930		68. 21. 17,23	29,760	60,8	62,5	84. 16. 12,57	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10', 210, 10', 220, 10', 234, 10', 244, 10', 254 at the five wires.
 ONE REVOLUTION = 20", 838. CORRECTION for RUNS = + 1", 3. ZENITH POINT = 21°. 53'. 11", 54. From March 31 = 21°. 53'. 12", 42. ASSUMED CO-LATITUDE = 37°. 47'. 8", 28.

(a) Indistinct image. (b) Observed as single. (c) Mercury agitated. (d) Unsteady. (e) Limbs much fringed. (f) Supposed to be taken on the micrometer wire. (g) Unsteady. Times by M, 1h. 4m. 16s and 1h. 5m. 13s. M fast on H, 23s. (h) Unsteady mercury. Micrometer reading was 10,529. (i) Mercury unsteady. Times by M, 1h. 4m. 8s and 1h. 5m. 15s. M fast on H, 24s. (k) N.L. missed by wrong setting. (l) The first faint, the other unsteady. Times by M, 1h. 4m. 26s and 1h. 5m. 43s. M fast on H, 25s. (m) No other star.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermum.		Apparent N.P.D. from the Observation.			Observer.
		A	B	C	D	E	F					Int.	Ext.				
		"	"	"	"	"	"	r.		°	'	"	Inch.	°	'	°	
Apr. 3	☉ S.L.....	3. 17,4	21,0	15,0	19,1	17,6	19,0	9,403		68. 53. 18,33	29,760	60,8	62,5	84. 48. 14,79	B.		
	Venus N.L.....	1. 34,7	34,7	29,4	34,8	34,6	33,0			53. 16. 33,60	29,712	61,9	66,0	69. 11. 3,67	B.		
	Venus S.L.....	...	...	...	...	...	...			53. 16. 50,92				69. 11. 20,99	B.
	(a) Σ 1324.....	1. 45,1	41,5	38,1	41,1	40,9	43,7			47. 16. 41,80	29,696	55,0	50,4	63. 11. 5,12	B.		
	Σ ₂ 201.....	1. 57,1	55,1	50,6	54,1	51,7	56,0			45. 31. 54,18				61. 26. 15,37	B.		
	(b) Σ 1355. np.....	0. 34,1	31,2	28,7	32,7	32,2	33,6			67. 10. 32,15	29,698	54,8	49,5	83. 5. 26,49	B.		
	θ Virginis.....	2. 11,3	9,1	8,1	9,8	8,0	10,1			78. 47. 9,50	29,652	51,3	46,3	94. 42. 34,47	B.		
	Spica R.....	4. 43,9	44,9	41,9	44,7	42,1	43,8	6,000	+1	139. 31. 12,21	29,648	51,6	45,6	100. 21. 0,21	B.		
	Spica.....	0. 15,0	14,1	11,6	14,2	12,8	14,0		+4½	84. 25. 13,07				100. 21. 0,65	B.		
	(c) S.L.....	4. 62,5	59,7	59,0	61,1	59,1	60,8	7,739	-2	88. 30. 59,00			45,8	104. 27. 8,96	B.		
	S.L.....	...	...	...	...	...	...	7,509	-1	88. 31. 0,57				104. 27. 10,53	B.
	S.L.....	...	...	...	...	...	...	7,301		88. 31. 1,70				104. 27. 11,66	B.
	S.L.....	...	...	...	...	...	...	7,200	+1	88. 31. 0,43				104. 27. 10,39	B.
	S.L.....	...	...	...	...	...	...	7,099	2	88. 30. 59,11				104. 27. 9,07	B.
	(d) η Bootis R.....	1. 55,9	55,3	52,8	56,9	55,2	56,0	11,199	+1¾	168. 51. 35,54	29,640	51,5	45,7	70. 49. 23,05	B.		
	η Bootis.....	4. 47,1	43,6	43,4	44,7	44,8	47,0		+4½	54. 54. 46,36				70. 49. 20,11	B.		
	κ Virginis.....	3. 27,3	25,0	23,7	24,9	24,6	25,2	13,767	-1	83. 37. 11,33	29,636	51,0	45,5	99. 32. 55,21	B.		
	(e) λ Virginis.....	3. 15,2	13,1	13,0	14,0	12,9	13,8			86. 43. 13,85				102. 39. 13,18	B.		
	(f) Σ 1885.....	2. 48,0	46,3	46,1	46,7	44,9	46,3			73. 27. 46,50	29,620	51,0	47,0	89. 22. 55,48	B.		
	i Bootis R.....	1. 27,0	26,9	22,0	27,1	24,1	25,8	11,631		197. 55. 56,43	29,612		46,6	41. 44. 28,29	B.		
	i Bootis.....	0. 29,2	27,2	24,7	27,8	26,1	27,9		+2	25. 50. 27,85				41. 44. 27,73	B.		
	Mercury, centre..	3. 59,1	61,1	56,0	59,1	58,9	57,0			70. 58. 58,70	29,600	60,2	63,4	86. 53. 59,30	B.		
Apr. 4	☉ S.L.....	1. 21,0	26,1	19,0	23,4	22,9	21,8	12,859	+1	68. 30. 28,12	29,600	60,7	62,9	84. 25. 23,41	B.		
	☉ N.L.....	3. 28,2	31,9	27,0	28,7	29,0	27,9		+3	67. 58. 29,87				83. 53. 24,06	B.		
	δ Ursæ Majoris R.	4. 17,0	18,1	13,3	17,1	14,6	17,7	10,832		207. 34. 3,94	29,642	52,2	45,4	32. 6. 10,95	B.		
	δ Ursæ Majoris...	2. 22,0	21,1	18,8	21,0	19,0	22,6		+1	16. 12. 21,09				32. 6. 11,14	B.		
	Σ 1659.....	4. 3,1	0,8	1,7	0,9	0,2	2,1		+3	85. 14. 1,37			44,1	101. 9. 53,24	B.		
	α Canum Venat. R.	0. 28,8	29,1	26,2	28,8	27,9	28,2	11,509	+¾	188. 50. 1,62	29,640	50,0	43,8	50. 50. 32,65	B.		
	α Canum Venat...	1. 23,0	20,8	19,4	20,9	18,4	22,9		+2½	34. 56. 21,73				50. 50. 31,16	B.		
	Σ ₂ 260.....	4. 6,7	4,3	4,1	3,9	4,0	7,8		+1	46. 19. 5,40				62. 13. 27,85	B.		
	(g) 21 Canum Venat. R.	0. 52,7	53,0	50,0	53,0	50,8	51,9	11,706	+½	200. 10. 21,22	29,638	50,9	43,5	39. 30. 1,23	B.		
	21 Canum Venat..	0. 63,1	61,7	61,2	60,2	59,6	62,1		+2¼	23. 36. 2,29				39. 29. 59,90	B.		
	Σ ₂ 266.....	4. 35,0	32,1	33,0	31,1	32,8	35,1			57. 34. 33,38	29,636	50,6	43,3	73. 29. 11,30	B.		
	m Virginis.....	4. 29,1	26,1	27,6	28,8	25,9	29,0			81. 59. 27,95				97. 55. 5,35	B.		
	(d) η Ursæ Majoris R.	1. 26,0	26,9	23,2	26,0	24,1	25,0	12,308		199. 45. 41,96	29,640	50,4	43,5	39. 54. 40,91	B.		
	η Ursæ Majoris...	0. 41,9	40,9	38,8	39,8	37,2	40,2		+1¼	24. 0. 40,11				39. 54. 38,14	B.		
	Σ ₂ 273.....	1. 49,9	50,0	47,7	48,0	47,7	50,1		+1½	68. 1. 49,02				83. 50. 45,76	B.		
	κ Virginis.....	2. 12,1	11,0	10,8	10,9	10,2	10,0			83. 37. 10,93	29,638	50,2	42,5	99. 32. 55,46	B.		
Apr. 6	(h) ☉ S.L.....	1. 20,2	20,4	18,0	20,8	18,1	19,1	13,909		67. 45. 2,82	29,872	55,4	56,9	83. 39. 57,80	B.		
	☉ N.L.....	3. 5,7	5,0	2,9	5,1	4,0	4,2			67. 13. 4,62				83. 7. 58,51	B.		
	ζ Geminorum R.	3. 5,1	5,8	4,9	6,0	4,1	5,8	9,159		170. 28. 27,74	29,888	52,4	50,6	69. 12. 28,49	B.		
	ζ Geminorum....	2. 57,9	56,6	55,6	56,8	57,1	57,1		+1½	53. 17. 57,11				69. 12. 28,50	B.		
	δ Geminorum R...	1. 12,9	11,2	10,9	12,9	11,1	11,3	8,941		171. 56. 38,64	29,896	52,0	49,7	67. 44. 15,64	B.		
	δ Geminorum....	4. 45,1	43,9	42,0	44,1	44,8	46,3		+1	51. 49. 44,63				67. 44. 14,07	B.		
	Castor R.....	3. 58,0	55,0	55,7	57,0	54,1	57,6	9,731	+1	181. 54. 6,92	29,898	51,5	47,9	57. 46. 35,07	B.		
	Castor.....	2. 16,4	14,9	13,4	15,1	13,2	15,6		+2¾	41. 52. 15,59				57. 46. 32,74	B.		
	Pollux R.....	4. 18,9	16,1	15,9	16,2	15,2	22,0	9,420	+1	178. 4. 34,58				61. 36. 11,95	B.		
	Pollux.....	1. 50,2	49,2	47,0	48,0	47,0	50,0		+3	45. 41. 49,38				61. 36. 11,07	B.		
	Σ ₂ 266.....	4. 37,0	32,3	34,9	31,9	30,8	36,0			57. 34. 34,02	29,956	42,2	36,4	73. 29. 13,01	B.		
	B.A.C. 4530.....	0. 55,4	52,1	53,2	51,9	48,2	51,8		+2¼	73. 35. 52,14				89. 31. 3,96	B.		
	(i) η Ursæ Majoris R.	1. 18,3	18,1	18,1	16,9	15,4	16,9	11,683		199. 45. 47,05	29,960	41,9	36,2	39. 54. 35,88	B.		
	(k) η Ursæ Majoris...	1. 11,2	10,1	11,1	8,0	6,0	9,1	11,683	+2½	24. 0. 40,12				39. 54. 38,21	B.		
	α Draconis R....	3. 24,7	24,0	23,0	22,2	20,2	23,9	13,441		214. 47. 16,24	29,964	41,9	35,5	24. 52. 50,67	B.		
	α Draconis.....	4. 15,6	12,9	15,0	12,1	10,3	14,0			8. 59. 13,50				24. 52. 55,57	B.		
Σ 1819.....	3. 44,4	42,2	42,1	42,1	40,9	43,2			70. 13. 42,65				86. 8. 46,08	B.			
φ Virginis.....	1. 32,7	31,0	30,3	29,2	27,8	31,1		+4½	75. 36. 30,34	29,962	41,9	35,2	91. 31. 48,10	B.			
Apr. 8	☉ S.L.....	1. 20,1	22,9	18,8	21,1	21,2	19,2	13,887		67. 0. 4,40	30,362	53,2	57,3	82. 54. 58,75	B.		
	☉ N.L.....	3. 7,1	9,8	6,2	8,0	7,1	5,9			66. 28. 7,48				82. 23. 0,76	B.		

MICROMETER READING for COINCIDENCE with Fixed Wire = 10',210, 10',220, 10',234, 10',244, 10',254 at the five wires.
 From April 4 = 10',206, 10',216, 10',230, 10',240, 10',250. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = + 1'',3.
 ZENITH POINT = 21°. 53'. 12'',42. ASSUMED CO-LATITUDE = 37°. 47'. 8'',28.

(a) Faint. (b) The recorded circle reading has been increased 4'. (c) Not well defined. The microscope readings have been diminished 1'.
 (d) Mercury agitated. (e) The reading of A was 4'. 15'',2. (f) A greater preceded. (g) Faint and doubtful. (h) Cloudy. (i) Unsteady.
 (k) The microscope readings have been increased conjecturally by 1', and the observation is supposed to have been taken on the micrometer wire.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	o		
Apr. 8	Castor R.....	3.48,5	45,8	44,1	48,9	45,1	48,4	9,200		181.54.8,44	30,360	54,4	56,8	57.46.33,49	B.
	(a) Castor	2.15,8	16,6	12,9	16,1	16,0	15,9		+2 $\frac{1}{4}$	41.52.16,14				57.46.33,23	B.
	Pollux R.....	4.24,9	24,8	21,1	25,9	23,8	26,1	9,791		178.4.33,78		54,2	55,8	61.36.12,73	B.
	Pollux	1.50,0	52,9	46,1	49,9	50,1	49,9		+1	45.41.49,98				61.36.11,65	B.
	(b) β Cancri R.....	0.51,3	54,1	49,4	54,5	53,0	52,0	10,569	+1 $\frac{3}{4}$	159.20.45,65	30,374	53,8	53,2	80.20.28,99	B.
	β Cancri	0.39,9	42,0	37,1	40,1	40,0	39,0		+4 $\frac{3}{4}$	64.25.40,24				80.20.30,04	B.
	δ Hydræ R.....	0.5,1	6,6	3,9	7,0	5,9	4,9	8,381	+2 $\frac{1}{4}$	155.55.44,48	30,378	53,5	51,4	83.45.37,21	B.
	δ Hydræ	0.38,3	40,1	35,0	39,1	39,0	37,4		+4 $\frac{3}{4}$	67.50.38,52				83.45.35,37	B.
	Σ 1263. sp.....	0.23,7	24,0	19,7	23,2	22,1	22,2			31.50.22,50				47.44.28,72	B.
	(c) Σ 1281	4.38,1	39,9	35,9	38,9	37,6	38,2		+1	73.29.38,30				89.24.48,55	B.
	ι Ursæ Majoris R..	4.14,2	15,0	11,9	15,1	13,1	14,1	9,870		198.19.21,58	30,380	53,0	49,0	41.21.2,82	B.
	ι Ursæ Majoris....	2.4,0	4,1	1,8	3,9	3,0	2,1		+1	25.27.3,40				41.21.2,96	B.
	Σ 197	0.55,1	56,1	52,3	57,0	54,0	54,0			70.30.54,78				86.25.57,93	B.
	Σ 1332. sp.....	2.29,9	29,1	25,9	28,9	28,7	29,2		+2	49.47.28,99	30,382	52,7	47,3	65.41.56,39	B.
	(b) h Ursæ Majoris R.	0.24,0	27,9	20,1	25,9	25,3	24,1	12,760	+2	213.24.31,05	30,384	52,2	47,8	26.15.37,52	B.
	h Ursæ Majoris....	1.54,0	53,9	51,1	53,9	52,7	53,0		+3	10.21.55,92				26.15.39,65	B.
	i Bootis R.....	1.51,8	52,1	49,0	51,9	50,0	50,6	12,710	+1 $\frac{1}{2}$	197.55.59,23	30,388	45,1	38,6	41.44.25,66	B.
	i Bootis	0.27,0	25,9	23,0	24,9	23,0	25,9		+3	25.50.26,48				41.44.26,53	B.
	(d) B. xv. 358.....	2.61,1	60,0	59,7	60,0	57,9	61,2			68.18.0,12	30,390	45,0	38,4	84.12.59,66	B.
	(e) β Serpentis.....	0.44,8	43,9	41,9	42,0	41,2	42,9			58.10.42,82	30,386	44,9	38,0	74.5.23,25	B.
Apr. 9	(f) \odot N.L.....	1.35,9	36,2	33,3	37,1	36,6	34,0	12,442		66.5.49,48	30,440	55,9	61,6	82.0.41,68	B.
	\odot S.L.....	2.45,2	46,7	42,8	45,0	46,4	43,1			66.37.44,98				82.32.38,23	B.
	Venus N.L.....	1.13,9	16,0	9,2	16,9	15,0	15,6			51.26.14,48	30,408	54,1	64,2	67.20.42,99	B.
	(g) Venus S.L.....	...	...	...	...	...	...	9,252		51.26.34,86				67.21.3,37	B.
	(h) Aldebaran R....	1.25,0	20,0	18,9	24,2	20,1	25,3	7,199		165.52.25,48	30,410	55,1	64,2	73.48.37,08	B.
	Aldebaran.....	3.56,1	59,9	52,8	58,7	56,9	57,2		+2	57.53.57,27				73.48.34,99	B.
	(i) Capella R.....	0.25,7	26,0	21,0	27,0	24,6	26,1	10,040		195.30.29,04	30,406	56,2	65,0	44.9.58,09	B.
	Capella	0.55,7	55,8	51,9	54,6	54,9	54,0			28.15.54,52				44.9.56,81	B.
	β Aurigæ R.....	0.25,1	29,3	22,1	29,1	29,0	26,9	8,630	+1 $\frac{1}{4}$	194.36.0,29	30,400	56,0	64,6	45.4.27,77	B.
	β Aurigæ	0.22,0	20,0	17,9	19,8	20,6	20,9		+4 $\frac{1}{2}$	29.10.23,26				45.4.26,48	B.
	(k) γ N.L.....	1.54,3	52,9	50,0	54,1	52,0	52,9	12,187	-2	92.41.6,36	30,348	50,0	42,6	108.37.53,20	B.
	γ N.L.....	...	...	...	...	...	...	12,382	-1	92.41.5,12				108.37.51,96	B.
	γ N.L.....	...	...	...	...	...	...	12,730		92.41.0,68				108.37.47,52	B.
	γ N.L.....	...	...	...	...	...	...	12,792	+1	92.41.2,02				108.37.48,86	B.
	γ N.L.....	...	...	...	...	...	...	12,878	+2	92.41.2,75				108.37.49,59	B.
	α Cygni R.....	4.9,6	8,1	7,1	7,9	8,0	8,0	11,031		194.23.51,61	30,342	48,7	47,4	45.16.36,91	B.
	α Cygni.....	2.35,8	33,0	32,0	32,9	33,1	35,1			29.22.33,77				45.16.37,45	B.
	α Cephei R.....	1.17,9	17,2	13,8	16,1	17,0	16,3	12,172		211.35.35,97	30,344	50,0	51,0	28.4.34,63	B.
	α Cephei	0.49,4	47,0	47,1	48,0	49,0	48,0		+1 $\frac{1}{4}$	12.10.48,56				28.4.34,32	B.
	(l) Polaris R.....	4.6,2	9,6	9,1	10,1	9,9	9,9	12,221		238.8.27,82	30,316	59,0	66,0	1.31.10,93	B.
	Polaris.....	2.59,0	57,9	58,0	59,4	62,2	59,5			345.37.59,55				1.31.13,46	B.
Apr. 10	(m) \odot S.L.....	0.47,9	50,1	45,7	49,8	49,0	46,4	10,790		66.15.36,56	30,308	58,9	64,6	82.10.28,49	B.
	\odot N.L.....	3.41,1	43,4	38,6	41,1	43,5	41,0			65.43.41,62				81.38.32,53	B.
	(n) α Persei R.....	3.35,0	32,0	27,9	34,9	34,0	34,8		+1	198.58.33,08	30,272	61,9	66,8	40.41.50,52	B.
	α Persei	2.49,4	51,1	47,1	50,0	52,9	48,5		+2 $\frac{1}{4}$	24.47.50,84				40.41.49,60	B.
	Venus S.L.....	4.63,1	66,0	59,9	65,1	66,9	62,9			51.10.3,98	30,244	62,8	66,1	67.4.31,84	B.
	(o) Venus N.L.....	...	...	...	...	...	...	11,050		51.9.46,89				67.4.14,75	B.
	Capella R.....	0.12,0	11,0	7,0	12,1	10,4	10,7	9,401		195.30.27,83	30,206	62,2	66,0	44.9.59,24	B.
	Capella	0.54,3	55,9	49,8	55,7	54,2	52,4		+1 $\frac{1}{2}$	28.15.54,10				44.9.56,33	B.
	Pollux R.....	4.12,1	15,0	10,6	14,1	14,9	13,2	9,241		178.4.34,11	30,150	61,0	58,0	61.36.12,11	B.
	Pollux	1.51,9	52,4	46,8	51,1	51,8	51,1			45.41.50,93				61.36.12,31	B.
	\circ Ursæ Majoris R.	4.22,0	22,1	18,0	23,0	23,0	23,1	10,484		210.54.16,76	30,146	59,2	54,6	28.45.54,70	B.
	\circ Ursæ Majoris...	2.10,2	9,7	7,7	11,1	10,2	9,9			12.52.9,90				28.45.56,52	B.
	(p) Σ 205.....	4.60,0	59,1	55,9	59,9	59,0	57,6			32.24.58,80	30,140	56,3	51,1	48.19.5,56	B.
	γ N.L.....	2.33,0	29,2	29,3	32,1	29,8	32,1	11,141	-2	88.52.5,48	29,946	48,6	46,6	104.48.18,84	B.
	γ N.L.....	...	...	...	...	...	...	11,241	-1	88.52.6,67				104.48.20,03	B.
	γ N.L.....	...	...	...	...	...	...	11,495		88.52.4,67				104.48.18,03	B.
	γ N.L.....	...	...	...	...	...	...	11,560	+1	88.52.6,44				104.48.19,80	B.
	γ N.L.....	...	...	...	...	...	...	11,859	+2	88.52.3,27				104.48.16,63	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',206, 10',216, 10',230, 10',240, 10',250 at the five wires.
 ONE REVOLUTION = 20'',838. CORRECTION for RUNS = +1'',3. ZENITH POINT = 21°.53'.12'',42. ASSUMED CO-LATITUDE = 37°.47'.8'',28.

(a) The Clamp failed. (b) Indistinct image. (c) A faint companion seen. (d) The Magnitude was judged to be 6,7. (e) The companion not seen. (f) Much fringed. (g) Unsteady. (h) Mercury agitated and star unsteady. (i) Too near the fixed wire. (k) Exceedingly faint. The first two bisections do not accord with the others. The micrometer readings have been increased 1'. (l) Very unsteady. Times by M, 1^h. 2^m. 30^s and 1^h. 3^m. 27^s. M slow on H, 29^s. (m) Microscope readings were 1' greater. (n) Came on fixed wire, not well bisected. (o) Unsteady. No correction for Runs: 1' has been deducted. (p) The recorded circle reading has been diminished 1'. This star is H.C. 18992.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	"	"		
Apr. 11	(a) S.L.	3. 33,9	32,0	29,9	32,1	31,9	31,5		+3	65. 53. 32,35	29,900	55,6	57,7	81. 48. 23,59	B.
	(b) Mercury, centre ..	3. 42,0	43,4	38,1	41,9	41,1	40,7			65. 28. 40,67	29,898	55,9	57,0	81. 23. 31,19	B.
Apr. 12	(c) S.L.	2. 38,7	39,0	34,9	38,2	36,1	37,1	12,980		65. 31. 39,56	29,888	52,7	56,4	81. 26. 30,22	B.
	⊙ N.L.	4. 45,9	46,0	44,1	45,0	44,3	44,2			64. 59. 44,25				80. 54. 33,90	B.
	Venus S.L.	3. 49,9	48,9	46,0	49,4	50,1	48,2			50. 38. 48,20	29,818	56,1	57,5	66. 33. 15,48	B.
	Venus N.L. ....	...	...	...	...	...	...	11,040		50. 38. 31,22				66. 32. 58,50	B.
Apr. 13	(d) Venus N.L.	3. 46,7	45,2	41,9	44,0	46,1	45,9			50. 23. 44,43	29,714	53,1	55,2	66. 18. 11,42	B.
Apr. 15	(c) S.L.	3. 22,0	22,4	19,9	22,2	22,8	22,6	14,607		64. 26. 50,19	30,046	56,1	59,0	80. 21. 38,82	B.
	⊙ N.L.	4. 58,8	59,6	56,1	57,6	58,8	58,1			63. 54. 57,45				79. 49. 45,11	B.
Apr. 16	λ Ursæ Majoris R.	2. 50,0	30,1	26,0	30,0	29,9	30,7	12,060		193. 21. 50,86	30,176	54,8	49,8	46. 18. 38,66	B.
	λ Ursæ Majoris...	4. 34,5	32,9	30,9	32,2	32,8	34,8			30. 24. 32,37				46. 18. 37,05	B.
	Σ ₂ 217.	4. 47,7	46,7	43,9	45,3	46,7	47,7			56. 4. 45,65				71. 59. 21,48	B.
	B.A.C. 3649.	1. 14,4	15,8	11,9	15,0	14,9	15,1			64. 26. 14,35		54,1	49,0	80. 21. 4,28	B.
	42 Leonis Min. R.	0. 59,0	60,6	56,9	60,3	59,9	57,8	8,240	+1	181. 10. 40,41				58. 30. 2,58	B.
	42 Leonis Minoris.	0. 43,1	43,2	39,2	41,9	43,8	42,8		+2½	42. 35. 42,70				58. 30. 0,85	B.
	Σ 1500.	3. 16,4	16,1	13,9	15,9	16,0	16,8			76. 43. 15,38		54,0	48,7	92. 38. 34,77	B.
Apr. 17	(e) S.L.	3. 16,0	19,0	14,1	17,0	17,2	17,7	12,203		63. 12. 35,15	30,140	59,0	64,4	79. 7. 20,53	B.
	⊙ S.L.	4. 26,1	28,0	24,0	26,8	27,0	26,9			63. 44. 25,83				79. 39. 12,15	B.
	Venus N.L.	0. 35,4	36,0	30,0	35,8	35,5	33,3		+2	49. 30. 34,82	30,100	61,8	67,4	65. 24. 59,70	B.
	(f) Venus S.L. ....	...	...	...	...	...	...	9,390	+2	49. 30. 52,63				65. 25. 17,51	B.
	Σ ₂ 251.	0. 35,0	34,0	29,9	34,5	33,2	34,9			41. 50. 33,50	30,064	55,3	49,9	57. 44. 50,02	B.
	Σ ₂ 254.	2. 48,2	46,9	43,6	47,5	47,0	47,1			14. 22. 46,32		55,0	49,8	30. 16. 33,82	B.
	α Canum Venat. R.	0. 34,0	34,9	30,7	34,1	33,9	32,9	11,540		188. 50. 5,93				50. 50. 28,99	B.
	α Canum Venat.	1. 20,0	19,0	16,0	18,0	17,9	19,2		+1	34. 56. 18,30				50. 50. 27,12	B.
	Σ ₂ 260.	4. 5,1	3,1	0,1	2,2	3,1	5,4			46. 19. 2,58	30,068	54,2	48,0	62. 13. 24,55	B.
	(g) 21 Canum Venat. R.	0. 32,7	33,9	27,9	34,1	32,0	32,0	10,500	+1¾	200. 10. 26,08				39. 29. 57,01	B.
	21 Canum Venat.	0. 59,2	58,1	55,8	58,0	58,2	57,9		+3	23. 35. 59,36				39. 29. 56,35	B.
	B. xiii. 375.	3. 6,8	5,0	2,5	5,9	5,7	5,8			81. 8. 4,83				97. 3. 38,66	B.
	Σ 1768.	0. 36,9	36,9	32,1	35,9	35,0	36,2			37. 0. 35,42			47,8	52. 54. 46,57	B.
	(h) η Ursæ Majoris R.	1. 37,4	39,0	33,8	38,1	37,5	36,9	12,530	+2½	199. 45. 48,24		53,8	46,9	39. 54. 35,28	B.
	η Ursæ Majoris...	0. 33,9	34,2	31,0	33,1	32,9	33,0		+4½	24. 0. 36,58				39. 54. 34,00	B.
Apr. 18	λ Ursæ Majoris R.	2. 18,0	19,1	14,1	19,0	17,0	17,9	11,137		193. 21. 58,46	30,210	52,8	45,0	46. 18. 31,79	B.
	λ Ursæ Majoris...	4. 33,0	31,1	29,9	33,0	31,1	31,8		+1¾	30. 24. 32,08				46. 18. 36,23	B.
	Σ ₂ 217.	4. 46,8	46,0	43,0	45,1	45,9	46,3			56. 4. 45,52	30,214	52,2	44,3	71. 59. 21,22	B.
	ω Ursæ Majoris R.	1. 37,9	38,0	33,1	38,0	36,8	37,9	10,538		193. 41. 30,36		50,9	44,4	45. 58. 59,55	B.
	ω Ursæ Majoris...	4. 56,1	54,9	53,1	54,8	53,2	54,9			30. 4. 54,50				45. 58. 58,31	B.
	(i) Σ 1501.	1. 6,3	4,9	2,2	5,1	2,7	3,0		+3	42. 26. 4,87				58. 20. 22,43	B.
	Spica R.	4. 20,0	17,1	17,4	19,1	17,0	19,8	4,669		139. 21. 14,11	30,238	47,1	40,5	100. 21. 2,37	B.
	Spica.	0. 10,6	9,2	8,0	10,3	6,7	8,7		+1¼	84. 25. 8,88				100. 20. 59,26	B.
	B.A.C. 4530.	0. 53,2	51,1	49,2	51,9	48,6	50,9			73. 35. 50,82				89. 31. 2,06	B.
	(k) Σ 1768.	0. 36,5	34,1	31,2	34,8	32,0	35,0			37. 0. 33,93	30,240	46,8		52. 54. 45,41	B.
	η Ursæ Majoris R.	1. 16,0	16,3	14,9	15,9	14,6	14,6	11,460		199. 45. 49,57	30,242	46,4	40,7	39. 54. 33,99	B.
	η Ursæ Majoris...	0. 39,3	38,5	37,0	38,0	36,9	38,1			24. 0. 37,97				39. 54. 35,43	B.
	Σ ₂ 273.	1. 50,9	49,0	47,9	48,9	47,1	49,2			68. 1. 48,83				83. 56. 46,53	B.
	(h) Arcturus R.	0. 44,9	43,0	41,9	45,0	43,1	43,1	10,790		169. 40. 31,66				70. 0. 27,52	B.
	Arcturus.	0. 54,1	54,2	50,0	53,1	51,1	52,1		+2½	54. 5. 52,77				70. 0. 25,85	B.
	γ Bootis R.	0. 27,1	27,1	25,9	27,2	25,2	26,2	11,668		188. 39. 56,31		45,9	40,6	51. 0. 39,14	B.
	γ Bootis.	1. 31,1	29,9	27,3	29,9	28,1	30,1			35. 6. 29,40				51. 0. 38,75	B.
	Piazzi XIV. 148.	1. 5,9	3,8	2,1	3,0	1,5	2,6			21. 51. 3,15				37. 44. 58,34	B.
	Σ ₂ 286.	2. 29,8	25,9	25,9	26,0	23,5	28,0		+2¼	26. 52. 27,35	30,244	45,1	39,6	42. 46. 27,84	B.
Apr. 19	(l) S.L.	1. 23,1	22,6	19,6	23,0	21,1	21,1	11,589		62. 30. 53,26	30,316	54,7	58,4	78. 25. 38,30	B.
	⊙ S.L.	2. 45,1	44,1	41,9	45,0	43,9	44,6		+2¼	63. 2. 44,79				78. 57. 30,77	B.
Apr. 20	(l) Venus S.L.	2. 22,0	23,0	17,9	21,8	22,7	21,8			48. 57. 21,53	30,200	57,7	60,2	64. 51. 46,23	B.
	Venus N.L. ....	...	...	...	...	...	...	11,141		48. 57. 2,38				64. 51. 27,08	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',206, 10',216, 10',230, 10',240, 10',250 at the five wires. From April 12 = 10',201, 10',211, 10',225, 10',235, 10',245. From April 18 = 10',202, 10',211, 10',222, 10',238, 10',245. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = +1'',3. From April 11 = -4'',3. From April 18 = 0'',0. ZENITH POINT = 21°. 53'. 12'',42. From April 17 = 21°. 53'. 13'',05. ASSUMED CO-LATITUDE = 37°. 47'. 8'',28.

(a) Set by mistake for the centre. (b) Very cloudy: hurried bisection. (c) Much clouded. (d) Micrometer for N.L. not read.
 (e) Clouds passing. (f) Faint from clouds. (g) Very faint. (h) Indefinite image. (i) Bisection difficult on account of the faintness of the object.
 (k) Observed as single. (l) Very faint from clouds.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.			Observer.
		A	B	C	D	E	F					Int.	Ext.				
		"	"	"	"	"	"										
Apr. 22	(a) Venus S.L.	3. 5,9	6,8	1,1	6,0	5,9	5,1			48. 38. 5,13	30,086	59,9	63,5	64. 32. 29,12			B.
	Venus N.L. ....	...	...	...	...	...	...	11,150		48. 37. 45,79				64. 32. 9,78			B.
	(b) Polaris R.	4. 18,2	17,7	14,1	18,1	16,9	17,6	12,746		238. 8. 24,42	30,190	61,8	57,3	1. 31. 14,41			B.
	Polaris.	3. 5,7	2,3	2,2	5,6	5,0	4,3			345. 38. 4,53				1. 31. 17,26			B.
Apr. 23	(c) ☉ N.L.	0. 30,9	32,7	27,0	31,2	31,1	29,9	12,289		61. 9. 47,39	30,168	57,9	59,0	77. 4. 29,82			B.
	☉ S.L.	1. 38,1	38,8	34,1	38,1	37,9	37,2		1	61. 41. 37,64				77. 36. 20,96			B.
	(d) Mercury, centre ..	2. 5,7	7,0	1,0	7,8	5,1	3,8			54. 42. 5,07	30,150	58,9	61,0	70. 36. 37,36			B.
	Venus N.L.	4. 6,4	5,0	1,8	5,9	4,0	3,0			48. 29. 4,35	30,102	60,5	63,1	64. 23. 28,19			B.
	Venus S.L. ....	...	...	...	...	...	...	9,238		48. 29. 24,85				64. 23. 48,69			B.
	(e) β Tauri R.	3. 19,1	21,9	17,1	22,6	19,9	20,2	8,491		178. 8. 56,21	30,100	60,7	62,6	61. 31. 50,27			B.
	(e) β Tauri.	2. 30,5	30,9	25,1	29,8	28,4	29,1		+1 3/4	45. 37. 29,22				61. 31. 49,60			B.
	(f) η Geminorum.	2. 48,9	48,9	45,0	49,0	47,4	47,6			51. 32. 47,80	30,088	61,1	62,2	67. 27. 15,61			B.
	μ Geminorum.	0. 19,0	19,1	14,1	19,0	17,0	17,1		2 1/4	51. 30. 17,87				67. 24. 45,63			B.
	η N.L.	3. 35,8	35,9	31,0	36,8	35,5	35,9	11,646	-2	53. 18. 8,05	30,074	61,2	63,9	69. 12. 38,16			B.
	η N.L. ....	...	...	...	...	...	...	11,546	-1	53. 18. 8,76				69. 12. 38,87			B.
	η N.L. ....	...	...	...	...	...	...	11,510		53. 18. 6,22				69. 12. 36,33			B.
	η N.L. ....	...	...	...	...	...	...	11,472	+1	53. 18. 8,10				69. 12. 38,21			B.
	η N.L. ....	...	...	...	...	...	...	11,410	+2	53. 18. 8,35				69. 12. 38,46			B.
	δ Geminorum.	4. 46,6	46,8	42,1	46,4	45,0	46,6			51. 49. 45,58	30,066	61,1	61,7	67. 44. 13,77			B.
	ι Ursæ Majoris R.	4. 33,4	33,9	28,8	35,1	32,1	33,3	10,701		198. 19. 22,78	30,050	60,1	58,5	41. 21. 2,14			B.
	ι Ursæ Majoris.	1. 64,1	63,1	59,8	64,1	61,8	62,6			25. 27. 2,58				41. 21. 1,40			B.
	(g) Polaris SP. R.	1. 28,8	28,3	22,6	30,1	25,4	29,8	12,008		241. 10. 50,38	30,016	52,8	49,0	-1. 31. 17,00			B.
	(g) Polaris SP.	0. 38,9	37,0	34,7	38,5	35,0	37,5			342. 35. 36,92				-1. 31. 15,80			B.
	(g) Polaris SP. R.	1. 15,4	15,0	10,8	15,1	12,0	15,8	11,511	+2	241. 10. 50,15				-1. 31. 16,77			B.
	(g) Polaris SP.	0. 43,2	41,1	37,9	42,1	39,1	41,9		-3	342. 35. 37,47				-1. 31. 15,25			B.
	Σ 266.	4. 33,2	30,8	27,9	31,1	30,1	33,8			57. 34. 31,15		52,9	48,7	73. 29. 8,50			B.
	B.A.C. 4530.	0. 54,2	54,0	51,0	53,9	50,2	53,1		+2	73. 35. 52,74				89. 31. 2,16			B.
	Σ 1768.	0. 62,1	61,1	57,3	61,7	57,5	61,0	11,511		37. 0. 33,52	30,014	52,9	48,6	52. 54. 44,61			B.
	(h) η Ursæ Majoris R.	1. 8,8	8,1	5,9	9,0	6,0	7,0	11,033		199. 45. 50,57				39. 54. 32,93			B.
	η Ursæ Majoris.	0. 37,1	35,3	33,0	35,1	32,9	35,9		+1	24. 0. 35,06				39. 54. 32,46			B.
	Σ 271.	0. 56,9	54,8	52,9	54,9	53,0	55,9			63. 10. 54,73		52,4	47,8	79. 5. 41,55			B.
	α Draconis R.	3. 25,0	24,9	19,9	24,7	21,1	24,0	13,227		214. 47. 20,66	30,010	52,1	47,4	24. 52. 47,20			B.
	α Draconis.	4. 9,4	6,2	5,9	7,9	5,1	8,1		3/4	8. 59. 7,28				24. 52. 49,04			B.
	(i) γ Bootis R.	0. 28,4	28,7	24,9	29,9	26,1	27,8	11,721		188. 39. 56,38	30,004	51,6	47,3	51. 0. 38,77			B.
	γ Bootis.	1. 29,4	27,2	25,0	27,8	26,0	29,0		+1 1/2	35. 6. 27,67				51. 0. 36,72			B.
Apr. 24	☉ S.L.	3. 19,8	19,7	15,0	19,6	17,1	19,1	14,440		61. 21. 50,48	30,044	56,1	57,0	77. 16. 33,24			B.
	(k) ☉ N.L.	4. 61,0	61,1	57,6	62,0	59,0	58,9			60. 49. 59,93				76. 44. 41,80			B.
	(l) Mercury, centre ..	0. 55,2	53,9	48,9	54,9	52,8	52,1			54. 5. 52,97	30,074	56,8	57,5	70. 0. 24,57			B.
	(h) Capella R.	0. 32,1	31,9	27,7	33,7	29,9	30,1	10,348		195. 30. 28,27	30,078	57,4	58,0	44. 9. 59,51			B.
	(h) Capella.	0. 59,9	58,0	55,0	59,1	55,1	56,8			23. 15. 57,32				44. 9. 59,00			B.
	Venus S.L.	1. 23,0	21,0	17,0	22,1	19,1	20,9			48. 21. 20,52				64. 15. 44,47			B.
	Venus N.L. ....	...	...	...	...	...	...	11,191		48. 21. 0,33				64. 15. 24,28			B.
	(m) γ Geminorum.	2. 58,5	57,4	54,1	59,9	57,0	57,7			53. 17. 57,43	30,050	51,1	57,5	69. 12. 27,89			B.
	(m) δ Geminorum.	4. 47,0	45,0	42,7	46,2	44,4	46,2			51. 49. 45,25		57,0	57,3	67. 44. 13,72			B.
	(n) η N.L.	3. 38,8	36,4	33,9	38,9	35,6	37,6	12,035	-2	55. 43. 3,07	30,090	56,8	56,4	71. 37. 37,09			B.
	η N.L. ....	...	...	...	...	...	...	11,890	-1	55. 43. 4,03				71. 37. 38,05			B.
	η N.L. ....	...	...	...	...	...	...	11,805		55. 43. 3,88				71. 37. 37,90			B.
	η N.L. ....	...	...	...	...	...	...	11,689	+1	55. 43. 4,58				71. 37. 38,60			B.
	η N.L. ....	...	...	...	...	...	...	11,591	+2	55. 43. 4,82				71. 37. 38,84			B.
	(o) ι Ursæ Majoris R.	4. 26,9	27,0	23,4	29,0	25,1	27,1	10,304		198. 19. 24,71	30,102	55,4	52,6	41. 21. 0,26			B.
	ι Ursæ Majoris.	2. 3,8	4,6	0,9	5,1	1,2	1,9			25. 27. 2,92				41. 21. 1,79			B.
	(p) υ Ursæ Majoris R.	1. 25,0	24,2	20,9	25,1	22,9	24,1		+3/4	209. 26. 23,55	30,108	53,8	49,1	30. 13. 49,98			B.
	υ Ursæ Majoris.	0. 3,1	4,9	1,0	5,8	1,9	1,3		+1 3/4	14. 20. 3,79				30. 13. 51,22			B.
	(i) λ Ursæ Majoris R.	2. 25,3	24,8	21,1	25,1	22,0	24,9	11,645		193. 21. 54,21	30,116	52,8	48,5	46. 18. 35,95			B.
	λ Ursæ Majoris.	4. 33,2	32,1	29,9	32,2	29,8	33,0		+2 1/2	30. 24. 32,60				46. 18. 36,66			B.
	Σ 218.	3. 51,3	51,9	49,0	51,2	47,4	51,0			69. 43. 50,30	30,120	52,7	47,8	85. 38. 50,59			B.
	(q) Σ 1445.	3. 56,1	54,9	54,0	55,1	52,1	54,9		+2	74. 8. 54,52				90. 4. 5,82			B.
42 Leonis Min. R.	0. 30,1	28,0	26,9	29,4	26,4	28,9	9,600		181. 10. 41,25	30,122	52,0	47,4	58. 30. 2,40			B.	
42 Leonis Minoris	0. 45,0	41,9	39,8	43,2	40,0	43,2			42. 35. 42,18				58. 29. 59,73			B.	

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					"	"		
Apr. 24	Pallas.....	3. 10.8	4.0	6.9	6.1	3.7	7.9	12,118	+1¼	51.43. 6.85	30,146	46.0	40.6	67.37. 36.43	B.
	Ceres.....	3. 7.1	1.9	4.0	3.0	0.2	3.1			88. 8. 3.22				104. 4. 13.81	B.
	(a) Polaris R.....	4. 15.9	13.9	12.0	14.6	12.1	14.0			238. 8. 23.67		59.7	58.0	1.31. 15.24	B.
	Polaris.....	2. 54.1	50.1	52.0	54.1	51.9	52.3			345.38. 5.39				1.31. 18.20	B.
Apr. 25	Mercury, centre...	2. 10.2	10.1	6.4	12.1	9.2	8.0	10,075	+1½	53.32. 9.20	30,134	58.0	63.7	69.26. 39.64	B.
	(b) Capella R.....	0. 25.3	27.9	21.0	27.0	24.1	25.0			195.30. 28.09		59.6	64.4	44. 9. 59.61	B.
	Capella.....	0. 59.0	58.0	54.9	57.2	56.2	55.2			28.15. 57.05				44. 9. 58.65	B.
	Venus N.L.....	3. 36.1	34.6	31.0	35.9	32.9	33.1	9,230	+3	48.13. 33.72	30,100	59.3	64.8	64. 7. 57.14	B.
	Venus S.L.....	...	...	...	...	...	...			48.13. 54.39				64. 8. 17.81	B.
	β Aurigæ R.....	0. 29.7	28.8	24.9	28.9	25.9	29.3	8,721	+4½	194.35. 58.44	30,096	59.7	65.0	45. 4. 30.17	B.
	β Aurigæ.....	0. 23.1	22.1	19.1	23.9	24.0	22.1			29.10. 25.41				45. 4. 27.92	B.
	Pollux R.....	4. 19.9	18.3	15.9	19.7	18.1	19.3	9,440	-2	178. 4. 34.58	30,068	59.8	63.3	61.36. 11.93	B.
	Pollux.....	1. 52.1	52.7	47.8	51.9	51.9	50.9			45.41. 51.10				61.36. 11.51	B.
	) N.L.....	3. 10.1	11.0	7.8	13.0	11.0	10.0	11,580	-1	59. 7. 47.16	30,064	59.1	60.5	75. 2. 25.99	B.
	) N.L.....	...	...	...	...	...	...			59. 7. 47.59				75. 2. 26.42	B.
	) N.L.....	...	...	...	...	...	...	11,311	+1	59. 7. 47.58	30,068			75. 2. 26.41	B.
	) N.L.....	...	...	...	...	...	...			59. 7. 47.35				75. 2. 26.18	B.
	) N.L.....	...	...	...	...	...	...	11,210	+2	59. 7. 47.35	30,064			75. 2. 26.18	B.
	) N.L.....	...	...	...	...	...	...			59. 7. 47.37				75. 2. 26.20	B.
	δ Cancr.	2. 11.3	10.5	6.4	13.0	10.8	10.1	88,670	+3	55.22. 10.22	30,060	59.0	59.8	71.16. 43.44	B.
	α² Cancr.	2. 61.5	62.8	58.9	62.0	62.7	61.2			61.38. 1.33		58.8	58.6	77.32. 44.43	B.
	α Hydræ R.....	3. 31.1	31.1	28.1	31.1	31.2	31.0			141.42. 31.94		58.0	56.5	97.59. 29.93	B.
	α Hydræ.....	3. 54.0	53.0	50.9	52.8	50.5	51.9	10,300	+4½	82. 3. 51.52	30,054	57.8	55.4	97.59. 27.29	B.
	(c) ν Ursæ Majoris R.	1. 24.0	23.8	18.9	25.7	23.1	23.0			209.26. 21.37				30.13. 52.28	B.
	ν Ursæ Majoris...	0. 4.1	4.7	1.9	6.1	2.9	1.2	9,185	+1¼	14.20. 3.89	30,056			30.13. 51.44	B.
	Regulus R.....	4. 12.7	12.2	10.1	14.1	11.8	12.1			162.24. 33.54		57.1	54.7	77.16. 35.56	B.
	Regulus.....	1. 52.7	54.2	49.1	54.0	52.2	52.1	11,091	+1½	61.21. 52.35	30,040			77.16. 35.35	B.
	Piazzi XIV. 148..	0. 65.1	61.2	60.7	62.4	58.9	61.2			21.51. 1.52		50.9	44.5	37.44. 56.71	B.
	Σ 1898.....	0. 58.2	55.5	55.0	57.1	53.9	55.8			14.10. 55.87				30. 4. 43.09	B.
	Σ 1907.....	0. 51.8	50.5	48.1	51.0	48.8	49.2	11,091	+4½	61.50. 51.99	30,036			77.45. 36.81	B.
	Σ 295.....	1. 24.0	21.1	19.8	21.5	18.1	21.6			36.41. 20.93				52.35. 31.81	B.
	Piazzi XV. 74....	2. 14.2	11.8	10.2	12.0	9.0	12.9	12,929	+1¾	36.12. 11.55	30,014			52. 6. 21.89	B.
	Pallas.....	0. 56.2	55.0	51.0	54.7	52.9	54.1			51.30. 54.38		51.0	43.9	67.25. 23.30	B.
	Ceres.....	3. 14.4	13.1	10.9	13.1	10.1	12.8			88. 8. 12.20				104. 4. 21.28	B.
	(d) Polaris R.....	4. 19.9	22.0	15.9	21.9	19.9	22.4	12,929	+1½	238. 8. 22.94	29,994	60.4	65.8	1.31. 16.87	B.
	Polaris.....	3. 4.9	1.2	1.9	6.0	2.9	4.1			345.38. 4.72				1.31. 18.43	B.
Apr. 26	(e) Mercury, centre...	0. 58.3	58.5	53.0	59.4	56.0	56.5	10,526	+3	53. 0. 56.90	29,962	60.2	68.9	68.55. 26.08	B.
	Capella R.....	0. 34.1	36.0	29.4	37.5	36.0	33.9			195.30. 28.12		61.1	70.7	44. 9. 59.47	B.
	Capella.....	0. 59.1	58.1	55.0	59.1	57.2	56.0			28.15. 57.37				44. 9. 58.86	B.
	Venus S.L.....	1. 63.5	64.1	59.9	65.0	64.0	61.1			48. 7. 2.82		61.9		64. 1. 25.65	B.
	Venus N.L.....	...	...	...	...	...	...			48. 6. 44.31				64. 1. 7.14	B.
Apr. 27	(f) ☉ N.L.....	3. 39.1	38.0	34.1	38.7	36.8	37.9	0,450	+1	59.52. 1.52	30,208	56.4	56.4	75.46. 42.11	B.
	☉ S.L.....	3. 47.7	46.1	44.3	46.0	43.6	45.9			60.23. 46.40				76.18. 27.85	B.
	Mercury, centre...	2. 19.1	18.7	14.0	18.6	16.1	16.4	9,303	+3	52.32. 17.02	30,206	56.8	57.6	68.26. 46.61	B.
	Venus N.L.....	0. 36.0	34.6	31.0	35.9	33.9	33.1			48. 0. 34.05		57.9	58.6	63.54. 57.66	B.
	(g) Venus S.L.....	...	...	...	...	...	...	9,303	+3	48. 0. 53.20	30,208			63.55. 16.81	B.
	π Leonis..	2. 62.1	60.2	57.9	60.5	59.8	61.4			65.18. 0.13		55.6	51.2	81.12. 50.89	B.
	(h) δ N.L.....	4. 14.7	13.0	11.0	14.9	11.1	15.1	9,655	-2	68.24. 31.73	30,216	55.1	49.7	84.19. 29.05	B.
	δ N.L.....	...	...	...	...	...	...			68.24. 31.13				84.19. 28.45	B.
	δ N.L.....	...	...	...	...	...	...	9,378	-1	68.24. 30.63	30,220			84.19. 27.95	B.
	δ N.L.....	...	...	...	...	...	...			68.24. 32.50				84.19. 29.82	B.
	δ N.L.....	...	...	...	...	...	...	9,013	+2	68.24. 31.57				84.19. 28.89	B.
	ω Ursæ Majoris R.	1. 14.7	12.2	10.4	14.5	11.7	13.1	9,260	+1	193.41. 32.74	30,220	55.7	49.6	45.58. 57.08	B.
	ω Ursæ Majoris...	4. 55.8	51.2	52.0	53.7	51.8	54.4			30. 4. 52.85				45.58. 56.57	B.
	d Leonis.....	3. 5.0	3.2	0.4	4.7	1.8	3.9	11,601	+1	69.38. 2.98	30,236			85.33. 3.03	B.
	χ Ursæ Majoris R.	4. 27.7	22.0	23.2	26.9	23.0	26.8			198.18. 56.10		52.9	45.8	41.21. 28.94	B.
	χ Ursæ Majoris...	2. 30.1	27.0	25.6	28.2	27.5	28.0	8,231	+2	25.27. 28.26				41.21. 27.20	B.
	ο Virginis R.....	1. 18.3	15.1	15.8	19.4	16.9	18.0			159.16. 58.66	52.4	45.5	80.24. 17.35	B.	
	ο Virginis.....	4. 30.9	26.7	25.9	28.5	28.0	30.4			64.29. 28.13			80.24. 18.04	B.	

MICROMETER READING for COINCIDENCE with fixed Wire = 10',202, 10',211, 10',222, 10',238, 10',245 at the five wires.
 ONE REVOLUTION = 20'',838. CORRECTION for RUNS = 0'',0. From April 25 = -1'',8. ZENITH POINT = 21°. 53'. 13'',05.
 ASSUMED CO-LATITUDE = 37°. 47'. 8'',28.

(a) Faint and unsteady. Times by M, 1h.16m.24s and 1h.17m.42s. M slow on H, 25s.
 (d) Times by M, 1h.5m.43s and 1h.7m.12s. M slow on H, 23s.
 (g) Cloudy. (h) This bisection considered unsatisfactory.

(b) Great motion. (c) Too close to fixed wire for satisfactory bisection.
 (e) Unsteady. (f) The recorded circle reading has been diminished 4'.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.		Observer.
		A	B	C	D	E	F					Int.	Ext.			
		"	"	"	"	"	"	r.		° ' "	Inch.	°	°	° ' "	"	
Apr. 27	δ Corvi R.....	2. 10,8	9,4	7,2	11,1	8,6	10,0	5,922		134. 3. 38,98	30,252	51,9	45,3	105. 39. 7,44	B.	
	δ Corvi.....	2. 48,5	45,0	44,1	45,6	45,5	47,0			89. 42. 45,68				105. 39. 6,00	B.	
	η Ursæ Majoris R.	1. 29,1	28,1	24,1	28,8	26,1	27,4	11,989		199. 45. 50,35	30,270	51,2	43,8	39. 54. 33,19	B.	
	η Ursæ Majoris....	0. 37,5	36,9	33,9	35,9	35,1	35,9			24. 0. 35,83				39. 54. 33,27	B.	
	Piazzi XV. 74.....	2. 14,1	11,1	10,0	12,1	9,8	13,1			36. 12. 11,57		49,0	40,4	52. 6. 22,16	B.	
	(a) Σ 1956.....	0. 64,6	61,4	59,1	61,2	58,3	61,2		+2	31. 46. 1,45				47. 40. 7,16	B.	
	(a) γ Coronæ.....	3. 15,9	11,2	11,1	10,4	9,9	12,9		+1½	47. 18. 11,87				63. 12. 35,70	B.	
	Σ 1977.....	4. 23,9	23,8	23,1	23,0	22,7	26,0			48. 9. 24,32				64. 3. 49,25	B.	
	Piazzi XV. 220. sf.	3. 32,6	28,1	26,8	28,2	27,1	30,2		+4½	70. 13. 28,83	30,264	48,5	40,6	86. 8. 31,58	B.	
	Σ 2007. sf.....	0. 37,7	32,9	33,0	33,1	33,0	35,1			60. 20. 34,10				76. 15. 17,07	B.	
	Pallas.....	2. 44,5	40,0	40,1	39,6	38,3	42,0			51. 7. 40,58	30,260	47,8	40,3	67. 2. 9,50	B.	
	Ceres.....	3. 29,8	23,9	26,2	23,6	23,9	25,8			88. 8. 25,33				104. 4. 34,95	B.	
Apr. 28	(b) Polaris R.....	4. 16,0	14,9	12,4	15,7	13,1	15,8	12,760		238. 8. 21,35	30,296	61,2	52,4	1. 31. 17,76	B.	
	Polaris.....	3. 8,1	5,9	6,2	8,1	6,6	6,9			345. 38. 6,81				1. 31. 18,10	B.	
Apr. 29	(c) ☉ N.L.....	0. 31,1	29,1	25,6	32,1	29,8	28,9	13,049		59. 14. 30,50	30,258	56,3	54,4	75. 9. 9,47	B.	
	☉ S.L.....	1. 14,3	13,2	10,2	14,9	13,0	12,2		+1	59. 46. 13,16				75. 40. 52,99	B.	
	Mercury, centre...	2. 33,6	33,1	29,2	33,7	32,2	32,1			51. 42. 32,17	30,248	55,7	55,9	67. 36. 59,93	B.	
	Venus N.L.....	0. 5,2	3,1	1,1	6,9	3,2	2,1			47. 50. 3,60	30,228	56,1	56,1	63. 44. 26,29	B.	
	Venus S.L.....	...	...	...	...	...	...	9,200		47. 50. 24,92				63. 44. 47,61	B.	
	(d) β Aurigæ R.....	0. 30,0	29,0	26,5	30,9	28,6	28,1	8,740		194. 35. 59,73		56,0	56,5	45. 4. 29,90	B.	
	β Aurigæ.....	0. 27,1	26,0	22,1	27,2	25,1	25,7		+1½	29. 10. 25,86				45. 4. 27,67	B.	
	(e) 42 Leonis Min. R.	0. 30,4	27,1	26,7	30,6	28,0	30,1	9,246	+3	181. 10. 49,02	30,220	50,2	43,5	58. 29. 55,74	B.	
	42 Leonis Minoris.	0. 43,9	41,0	38,9	41,9	41,0	41,2		+4½	42. 35. 43,13				58. 30. 0,07	B.	
	(e) α Ursæ Majoris R.	0. 25,0	23,1	21,2	25,9	24,7	25,0	9,379	+1	212. 15. 41,76				27. 24. 29,50	B.	
	α Ursæ Majoris...	0. 48,0	45,0	45,2	47,1	46,2	45,1		+2½	11. 30. 47,86				27. 24. 31,30	B.	
	σ Leonis.....	2. 23,0	22,0	18,0	21,0	18,4	21,1			67. 12. 20,40	30,228	49,6	42,3	83. 7. 15,24	B.	
	ν Leonis.....	2. 56,2	53,1	52,9	53,9	50,9	54,2			74. 2. 53,37				89. 58. 4,67	B.	
	η N.L.....	2. 51,9	49,1	47,0	48,9	46,8	49,1	11,161	-2	79. 37. 36,44	30,216	48,0	39,8	95. 33. 5,85	B.	
	η N.L.....	...	...	...	...	...	...	10,989	-1	79. 37. 37,37				95. 33. 6,78	B.	
	η N.L.....	...	...	...	...	...	...	10,730		79. 37. 38,06				95. 33. 7,47	B.	
	η N.L.....	...	...	...	...	...	...	10,595	+1	79. 37. 37,29				95. 33. 6,70	B.	
	η N.L.....	...	...	...	...	...	...	10,405	+2	79. 37. 37,45				95. 33. 6,86	B.	
	η Virginis.....	3. 7,1	3,0	3,1	2,2	0,9	3,2			73. 53. 3,07	30,208	47,6	38,8	89. 48. 14,43	B.	
	Σ ₂ 251.....	0. 37,6	32,7	31,8	33,1	32,1	34,3			41. 50. 33,57	30,204	46,8		57. 44. 49,82	B.	
	q Virginis.....	0. 7,2	2,9	3,8	5,1	2,1	3,4			82. 40. 4,08				98. 35. 45,79	B.	
	ε Ursæ Majoris R.	4. 24,2	21,9	20,6	22,2	21,1	23,2	12,290		206. 28. 38,85	30,198	45,9	38,6	33. 11. 38,50	B.	
	ε Ursæ Majoris....	2. 54,6	51,0	51,1	50,9	49,9	51,0			17. 17. 51,25				33. 11. 40,78	B.	
	Σ 1719. sp.....	4. 42,1	38,0	38,1	38,1	36,1	39,9			72. 39. 38,45		45,5	38,5	88. 34. 46,55	B.	
	B. XIII. 113.....	3. 35,8	30,8	32,0	31,9	30,0	34,0			81. 18. 32,20				97. 14. 8,27	B.	
	(e) Spica R.....	4. 19,1	16,1	17,9	16,9	14,1	18,1	4,629	+2	139. 21. 13,94		44,7	37,9	100. 21. 3,88	B.	
	Spica.....	0. 14,9	11,1	10,8	12,2	9,0	11,1		+4½	84. 25. 10,94				100. 21. 0,94	B.	
	Σ ₂ 269.....	3. 21,7	17,0	17,1	17,6	15,8	20,1		+2	38. 23. 18,46				54. 17. 30,71	B.	
	η Ursæ Majoris R.	1. 23,9	22,3	20,2	22,0	19,9	21,1	11,552		199. 45. 53,78				39. 54. 30,65	B.	
	η Ursæ Majoris....	0. 40,0	36,4	36,3	36,7	35,0	36,0			24. 0. 36,70				39. 54. 33,31	B.	
	Σ ₂ 271.....	0. 58,8	55,9	55,3	55,0	54,0	55,3		+1½	63. 10. 55,74	30,204	44,3	37,0	79. 5. 43,20	B.	
	Pallas.....	0. 22,2	16,1	17,2	16,2	14,9	18,0			50. 45. 17,42	30,202	42,8	37,6	66. 39. 45,09	B.	
	Ceres.....	3. 48,8	42,8	46,2	44,9	42,1	45,1			88. 8. 44,77				104. 4. 55,68	B.	
	(f) Polaris R.....	4. 25,0	23,9	22,7	23,6	22,1	23,2	13,147		238. 8. 22,12	30,272	56,0	60,0	1. 31. 17,68	B.	
	Polaris.....	3. 6,2	5,1	6,0	6,1	5,9	5,0			345. 38. 5,82				1. 31. 17,80	B.	
Apr. 30	☉ S.L.....	4. 22,9	24,0	21,0	23,3	23,1	22,5	14,638	+1½	59. 27. 51,33	30,270	57,1	62,3	75. 22. 29,97	B.	
	☉ N.L.....	1. 7,0	8,0	4,9	7,3	8,0	5,1		+3	58. 56. 7,65				74. 50. 45,45	B.	
	Mercury, centre...	1. 22,9	25,7	19,5	24,6	23,1	22,7			51. 21. 23,00	30,272	57,3	63,0	67. 15. 49,85	B.	
	Venus S.L.....	1. 8,4	6,7	3,1	8,1	6,2	4,1			47. 46. 6,03	30,264	58,6	63,5	63. 40. 28,25	B.	
	Venus N.L.....	...	...	...	...	...	...	11,239		47. 45. 44,85				63. 40. 7,07	B.	
	δ Ursæ Majoris R.	4. 23,1	23,0	20,1	22,2	21,4	23,1	10,791		207. 34. 10,04	30,296	50,7	44,0	32. 6. 6,20	B.	
	δ Ursæ Majoris...	2. 17,4	14,8	13,9	16,9	15,8	16,6		+1½	16. 12. 16,51				32. 6. 4,93	B.	
	η Virginis.....	3. 3,0	0,0	0,1	2,5	0,0	2,1			73. 53. 1,10				89. 48. 11,84	B.	
	q Virginis.....	0. 5,0	1,1	2,9	5,1	3,4	3,1			82. 40. 3,43	30,300	50,0	43,3	98. 35. 44,48	B.	

MICROMETER READING for COINCIDENCE with fixed Wire = 10',202, 10',211, 10',222, 10',238, 10',245 at the five wires.
 From April 28 = 10',203, 10',212, 10',223, 10',239, 10',246. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = - 1'',8.
 ZENITH POINT = 21°. 53'. 13'',05. From April 28 = 21°. 53'. 13'',91. ASSUMED CO-LATITUDE = 37°. 47'. 8'',28.

(a) Observed as single: the former was seen double.
 (c) Very much fringed. M slow on H, 24°.

(b) Very faint from clouds. Times by M, 1h. 0m. 16s and 1h. 1m. 14s. M slow on H, 24°.
 (d) Faint and unsteady.
 (e) Badly defined image.
 (f) Great unsteadiness. Times by M, 1h. 3m. 24s and 1h. 4m. 20s.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.		Observer.
		A	B	C	D	E	F					Int.	Ext.			
		"	"	"	"	"	"				Inch.	"	"	"	"	
Apr. 30	Σ , 254.....	2. 48,2	44,4	45,6	47,1	45,2	47,4			14. 22. 46,15	30,302	49,8	42,5	30. 16. 32,61		B.
	(a) Σ 1680.....	3. 4,8	2,1	0,9	1,8	1,4	2,0			51. 28. 2,55				67. 22. 30,96		B.
	) N.L.....	3. 16,1	14,0	14,2	14,9	13,2	14,0	11,919	+3	85. 12. 45,77	30,298	49,1	42,1	101. 8. 39,11		B.
	) N.L.....	...	...	...	...	...	...	11,759	-2	85. 12. 45,66				101. 8. 39,00		B.
	) N.L.....	...	...	...	...	...	...	11,588	-1	85. 12. 45,76				101. 8. 39,10		B.
	) N.L.....	...	...	...	...	...	...	11,367	+1	85. 12. 46,93				101. 8. 40,27		B.
	) N.L.....	...	...	...	...	...	...	11,230	+2	85. 12. 46,12				101. 8. 39,46		B.
	(a) Pallas.....	4. 31,9	26,5	27,2	29,1	26,9	32,8			50. 34. 28,80	30,292	44,9	39,6	66. 28. 56,18		B.
	(a) Ceres.....	3. 55,1	51,3	53,0	53,1	50,1	54,1			88. 8. 52,55				104. 5. 3,28		B.
	(b) ζ Ophiuchi R.....	3. 22,0	19,1	20,3	20,1	18,0	21,1	12,830	+1½	139. 27. 26,02	30,290	49,6	38,9	100. 14. 51,40		B.
	ζ Ophiuchi.....	4. 4,8	0,9	2,1	3,9	2,0	4,1		+3	84. 19. 2,47				100. 14. 52,07		B.
	σ Ophiuchi R.....	2. 18,4	15,9	15,9	15,8	15,9	19,0	7,461		153. 58. 14,24		43,9	38,6	85. 43. 14,81		B.
	σ Ophiuchi.....	3. 16,9	14,0	12,7	14,9	12,9	16,2		+1	69. 48. 14,41				85. 43. 15,64		B.
	ι Herculis R.....	1. 25,1	23,2	22,9	22,9	21,9	24,0	11,871		195. 45. 48,91	30,292	43,9	38,1	43. 54. 39,77		B.
	ι Herculis.....	0. 41,7	39,4	38,8	39,8	38,8	40,2			28. 0. 39,75				43. 54. 40,61		B.
	Polaris R.....	4. 14,6	14,8	11,9	14,9	12,1	13,5	12,700		238. 8. 21,75	30,374	53,4	62,3	1. 31. 18,11		G.
	Polaris.....	3. 8,6	5,1	7,0	8,5	7,3	6,7			345. 38. 7,02				1. 31. 19,06		G.
May 1	\odot N.L.....	3. 19,0	22,9	17,9	22,5	21,9	19,8	11,396		58. 37. 56,21	30,374	56,5	64,5	74. 32. 33,49		B.
	\odot S.L.....	4. 39,8	43,0	37,6	42,2	41,2	39,2		+1	59. 9. 40,74				75. 4. 18,85		B.
	Mercury, centre..	2. 40,6	41,3	37,1	39,2	41,1	41,9		+2	51. 2. 40,86	30,368	56,4	66,0	66. 57. 7,20		B.
	(c) Capella R.....	0. 29,9	29,0	26,0	30,8	28,2	29,7		+1	195. 30. 28,77	30,360	57,2		44. 9. 59,83		B.
	Capella.....	0. 58,0	59,4	55,8	60,6	59,0	56,9		+2½	28. 15. 59,24				44. 10. 0,02		B.
	Venus N.L.....	2. 3,9	6,8	0,9	5,9	5,0	3,0			47. 42. 4,25	30,354	57,0	65,9	63. 36. 26,34		B.
	Venus S.L.....	...	...	...	...	...	...	9,170		47. 42. 26,19				63. 36. 48,28		B.
	Spica R.....	4. 21,3	23,2	19,8	22,1	23,5	22,9	4,821		139. 21. 14,69	30,404	50,8	44,7	100. 21. 2,28		B.
	Spica.....	0. 11,1	12,1	9,8	12,1	11,0	9,8			84. 25. 10,9				100. 21. 0,13		B.
	(d) Σ 1776.....	0. 34,0	31,9	28,9	32,0	31,1	32,1		+1	27. 5. 31,83				42. 59. 31,66		B.
	(e) ϵ Virginis.....	4. 59,1	59,1	57,2	60,3	58,9	57,0			91. 24. 58,60	30,406	50,0		107. 21. 32,16		B.
	) N.L.....	3. 28,8	27,9	26,0	26,7	27,1	27,1	11,657	-2	90. 13. 3,23		49,4	43,0	106. 9. 27,86		B.
	) N.L.....	...	...	...	...	...	...	11,524	-1	90. 13. 3,09				106. 9. 27,72		B.
	) N.L.....	...	...	...	...	...	...	11,390		90. 13. 2,93				106. 9. 27,56		B.
	) N.L.....	...	...	...	...	...	...	11,188	+1	90. 13. 4,22				106. 9. 28,85		B.
	) N.L.....	...	...	...	...	...	...	11,078	+2	90. 13. 3,31				106. 9. 27,94		B.
	λ Virginis.....	3. 12,9	12,2	11,1	12,6	11,9	11,9			86. 43. 12,08		48,9	43,1	102. 39. 13,74		B.
	γ Bootis R.....	0. 30,5	32,0	28,0	32,1	31,1	30,1	11,700		188. 39. 59,85				51. 0. 36,50		B.
	γ Bootis.....	1. 27,8	25,9	24,0	26,1	26,4	26,7		+1¼	35. 6. 26,34				51. 0. 34,87		B.
	Piazzi XIV. 148..	0. 61,9	60,1	58,9	60,4	60,0	60,0			21. 51. 0,22				37. 44. 54,55		B.
	α^2 Libræ R.....	4. 32,0	31,9	29,8	31,1	31,0	31,7	25,500	+1	134. 19. 13,26		47,1	41,3	105. 23. 34,13		B.
	α^2 Libræ.....	2. 18,2	16,9	15,9	17,1	16,1	16,1		+3	89. 27. 16,35				105. 23. 35,92		B.
	ι Bootis R.....	1. 19,2	20,9	16,3	20,8	19,1	19,4	10,890		197. 56. 5,38	30,406	46,9	41,2	41. 44. 20,98		B.
	ι Bootis.....	0. 22,1	21,1	19,1	21,9	20,2	20,9			25. 50. 20,88				41. 44. 19,42		B.
	ι Draconis R.....	1. 25,8	27,1	23,2	27,2	25,3	25,2	11,718		209. 10. 54,47		46,4	40,2	30. 29. 19,98		B.
	ι Draconis.....	0. 33,1	32,1	30,6	32,7	32,8	31,7			14. 35. 32,17				30. 29. 18,80		B.
	(f) Pallas.....	3. 61,3	58,8	58,8	58,8	58,1	60,2		+¾	50. 23. 59,46	30,398	45,4		66. 18. 26,67		B.
	Ceres.....	4. 4,0	1,7	3,2	3,0	0,9	2,1		+3	88. 9. 2,13				104. 5. 13,20		B.
	Polaris R.....	4. 15,1	16,9	12,2	15,4	13,8	14,6	12,811		238. 8. 20,75	30,438	57,8	61,8	1. 31. 18,97		B.
	(g) Polaris.....	3. 9,9	7,9	7,9	10,0	7,1	10,0			345. 38. 8,94				1. 31. 20,84		B.
May 2	(h) \odot S.L.....	2. 29,2	31,9	26,1	31,0	31,8	30,6	12,309		58. 51. 46,50	30,414	58,0	64,8	74. 46. 24,17		B.
	\odot N.L.....	0. 44,9	46,0	40,6	44,7	45,0	42,0	12,309		58. 20. 0,29				74. 14. 36,98		B.
	Mercury, centre..	1. 25,1	25,1	21,7	24,9	25,0	24,0		+1	50. 46. 24,56	30,400	60,0	66,5	66. 40. 50,55		B.
	Capella R.....	0. 31,9	32,2	27,9	33,0	32,1	30,8	10,438		195. 30. 26,73	30,382	61,1	67,0	44. 10. 1,86		B.
	Capella.....	0. 58,1	58,2	54,2	59,0	57,2	55,6			28. 15. 57,05				44. 9. 57,82		B.
	Venus S.L.....	4. 23,3	25,0	19,9	24,1	24,9	22,3			47. 39. 23,23	30,372	62,1	66,5	63. 33. 45,25		B.
	Venus N.L.....	...	...	...	...	...	...	11,278		47. 39. 1,14				63. 33. 23,16		B.
	ι Ursæ Majoris R..	4. 6,1	6,8	2,8	8,2	7,0	5,3	9,271		198. 19. 25,75	30,342	60,6	60,2	41. 21. 0,05		B.
	ι Ursæ Majoris....	1. 63,2	63,0	59,1	63,9	61,9	61,0			25. 27. 2,02				41. 21. 0,00		B.
	Σ 1678. <i>nf.</i>	1. 55,0	53,6	51,0	54,1	52,9	54,0			58. 51. 53,43	30,296	50,1	44,0	74. 46. 32,80		B.
	(i) ϵ Virginis R.....	3. 26,8	24,7	23,0	25,2	24,1	26,4	9,027	+2½	161. 28. 50,21		49,5	43,5	78. 12. 22,90		B.
	ϵ Virginis.....	2. 34,8	34,1	28,9	34,8	31,9	34,0		+4½	62. 17. 33,71				78. 12. 19,00		B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',203, 10',212, 10',223, 10',239, 10',246 at the five wires.
 From May 2 = 10',198, 10',207, 10',218, 10',234, 10',241. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = -1'',8.
 From May 1 = -0'',1. ZENITH POINT = 21°. 53'. 13'',91. ASSUMED CO-LATITUDE = 37°. 47' 8'',28.

(a) Faint. (b) Mercury agitated: indistinct image. (c) Accidentally on the fixed wire, but not well bisected. (d) Observed as single.
 (e) No correction for Runs. (f) The microscope readings have been increased 1'. (g) Times by M, 1h. 2m. 52s and 1h. 3m. 42s. M slow on H, 24s.
 (h) Very much fringed. (i) Badly defined image.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
May 2	Σ 260.....	4. 3,2	0,7	0,0	0,9	0,0	2,2		+1	46. 19. 1,23	30,296	49,5	43,5	62. 13. 22,79	B.
	B. XIII. 113.....	3. 34,9	31,3	31,9	33,1	31,6	33,9			81. 18. 32,77	30,294	49,0	43,0	97. 14. 8,21	B.
	(a) Spica R.....	2. 24,1	22,7	20,7	24,9	23,2	23,9	89,061		139. 21. 15,74	30,290	48,6	43,1	100. 21. 1,18	B.
	Spica.....	0. 12,1	11,8	9,1	13,1	10,0	10,9		+1½	84. 25. 11,11				100. 21. 0,21	B.
	Σ 269.....	3. 20,0	17,0	15,2	18,0	16,3	19,3			38. 23. 17,62				54. 17. 29,73	B.
	(b) η Ursæ Majoris R.	1. 21,9	21,1	18,8	20,6	20,9	19,6	11,549	+1¾	199. 45. 52,63		48,1	43,0	39. 54. 31,78	B.
	η Ursæ Majoris...	0. 35,9	33,1	31,7	34,0	33,2	33,1		+3	24. 0. 35,12				39. 54. 31,71	B.
	(b) α Draconis R.....	3. 30,9	29,0	25,9	29,1	29,3	29,0	13,290	+2	214. 47. 24,02	30,282	47,7	42,0	24. 52. 44,42	B.
	α Draconis.....	4. 4,1	1,8	2,2	2,2	3,1	1,9		+3	8. 59. 5,44				24. 52. 46,06	B.
	λ Virginis.....	3. 15,0	12,1	12,7	13,4	10,1	13,0			86. 43. 12,70				102. 39. 14,14	B.
	(a) α² Libræ R.....	4. 28,8	24,9	24,7	26,0	24,2	27,9	10,979		134. 19. 10,21	30,268	46,9	41,2	105. 23. 36,55	B.
	α² Libræ.....	2. 19,0	16,3	14,3	16,7	13,4	17,2		+1¼	89. 27. 16,09				105. 23. 35,03	B.
	(c) S.L.....	1. 23,3	20,7	20,3	21,9	15,8	21,8	5,905	-2	94. 42. 54,58	30,264	46,7	41,1	110. 40. 1,12	B.
	S.L.....	...	...	...	...	...	...	5,822	-1	94. 42. 54,30				110. 40. 0,84	B.
	S.L.....	...	...	...	...	...	...	5,745		94. 42. 53,84				110. 40. 0,38	B.
	S.L.....	...	...	...	...	...	...	5,619	+1	94. 42. 54,39				110. 40. 0,93	B.
	S.L.....	...	...	...	...	...	...	5,512	+2	94. 42. 54,27				110. 40. 0,81	B.
	β¹ Scorpii.....	0. 41,1	36,9	35,6	38,1	37,0	37,9			93. 25. 37,77	30,240	45,4	40,2	109. 22. 30,50	B.
	Pallas.....	3. 49,2	46,1	45,1	46,1	46,1	49,0		+1	50. 13. 47,11				66. 8. 13,92	B.
	Ceres.....	4. 18,8	14,6	15,9	15,9	14,2	16,2			88. 9. 15,92		45,2	40,4	104. 5. 26,25	B.
May 3	⊙ N.L.....	2. 25,5	28,0	23,3	27,6	25,0	25,2	10,401		58. 2. 21,96	30,174	58,1	60,3	73. 56. 58,40	B.
	⊙ S.L.....	4. 4,9	5,9	2,1	6,4	6,2	4,1		+1	58. 34. 5,17				74. 28. 42,43	B.
	Mercury, centre...	2. 28,7	27,0	24,1	28,1	26,1	28,1			50. 32. 27,02	30,162	58,1	60,1	66. 26. 52,86	B.
	Venus N.L.....	1. 36,2	36,1	31,8	38,1	34,0	34,5			47. 36. 35,12	30,150	57,9	58,9	63. 30. 57,30	B.
	Venus S.L.....	...	...	...	...	...	...	9,157		47. 36. 57,23				63. 31. 19,41	B.
May 4	Venus S.L.....	0. 7,9	6,6	4,9	8,9	3,7	6,0			47. 35. 6,33	30,106	57,8	58,8	63. 29. 28,44	B.
	Venus N.L.....	...	...	...	...	...	...	11,212		47. 34. 45,62				63. 29. 7,73	B.
May 6	(d) Venus S.L.....	3. 17,9	19,9	14,1	17,1	17,1	17,2			47. 33. 17,20	29,792	60,4	68,0	63. 27. 38,49	B.
	Venus N.L.....	...	...	...	...	...	...	11,248		47. 32. 55,73				63. 27. 17,02	B.
	ε Ursæ Majoris R.	4. 26,5	28,6	22,9	25,4	26,0	27,0	12,471		206. 28. 39,10	29,784	55,5	50,4	33. 11. 38,45	B.
	ε Ursæ Majoris...	2. 49,1	48,9	45,2	46,9	47,8	47,1		+¾	17. 17. 47,61				33. 11. 37,32	B.
	η Ursæ Majoris R.	1. 27,4	27,8	24,7	26,0	27,1	26,5	11,830		199. 45. 52,99	29,780	54,0	48,6	39. 54. 31,36	B.
	η Ursæ Majoris...	0. 34,9	34,1	31,7	32,1	33,0	33,5		+1¼	24. 0. 33,50				39. 54. 30,03	B.
	Ceres.....	0. 17,8	14,1	14,9	14,7	13,0	15,3		+2	88. 10. 14,82	29,750	50,3	44,5	104. 6. 21,91	G.
	(e) Polaris R.....	4. 29,0	27,4	25,0	26,0	27,0	28,1	13,369		238. 8. 20,99	29,778	55,9	59,9	1. 31. 19,49	B.
	Polaris.....	3. 8,1	5,0	6,2	7,0	6,7	7,2			345. 38. 7,48				1. 31. 20,14	B.
May 7	⊙ N.L.....	0. 27,9	30,8	24,1	27,0	29,9	27,1	13,231		56. 54. 25,02	29,784	61,0	65,6	72. 48. 58,80	B.
	⊙ S.L.....	1. 4,9	7,7	3,0	5,1	6,9	4,0		+1½	57. 26. 5,65				73. 20. 40,21	B.
May 8	(f) ⊙ S.L.....	0. 30,8	31,0	25,6	28,1	30,0	29,1	12,259		57. 9. 46,57	29,932	59,9	62,6	73. 4. 21,16	B.
	⊙ N.L.....	3. 5,8	6,1	2,2	3,9	5,9	4,9		+1	56. 38. 5,02				72. 32. 38,84	B.
	ε Ursæ Majoris R.	4. 17,1	17,0	13,9	15,7	15,3	16,1	11,931	+1½	206. 28. 40,01	29,936	57,7	52,5	33. 11. 37,51	B.
	ε Ursæ Majoris...	2. 45,9	46,2	43,0	44,1	45,1	44,9		+3	17. 17. 46,92				33. 11. 36,62	B.
	(g) Polaris SP. R....	1. 16,7	16,2	11,9	14,9	14,9	15,9	11,201		241. 10. 54,68	29,940	57,0	51,1	-1. 31. 20,12	B.
	Polaris SP.....	0. 34,4	33,1	31,6	33,9	34,0	33,4			342. 35. 33,16				-1. 31. 20,10	B.
	Spica R.....	1. 20,9	22,1	18,0	21,2	20,0	21,1	10,640	+¾	139. 21. 12,01		56,7	50,6	100. 21. 1,84	B.
	Spica.....	0. 15,2	16,0	12,7	14,9	15,2	13,1		+2½	84. 25. 14,34				100. 21. 0,37	B.
	η Ursæ Majoris R.	1. 24,0	24,0	21,0	22,9	23,0	23,0	11,652	+2½	199. 45. 52,51		56,1	50,2	39. 54. 31,84	B.
	η Ursæ Majoris...	0. 31,1	29,8	26,2	27,2	28,3	28,1		+4½	24. 0. 32,09				39. 54. 28,62	B.
May 11	(h) ⊙ N.L.....	1. 21,1	22,0	17,1	19,1	20,2	19,8	11,420		55. 50. 54,81	29,968	58,9	59,4	71. 45. 27,77	B.
	⊙ S.L.....	2. 31,9	30,2	28,0	30,3	31,1	30,1		+3	56. 22. 31,13				72. 17. 4,86	B.
May 13	(i) Σ 1606.....	0. 22,9	26,4	18,4	22,7	21,8	22,8			33. 20. 22,48	30,304	60,0	57,7	49. 14. 28,63	G.
	(k) H. C. 23132.....	3. 58,1	58,1	53,8	56,6	56,0	56,8			48. 13. 56,37				64. 8. 19,54	G.
	(l) 21 Canum Ven. R.	0. 23,6	22,1	19,9	22,1	22,1	21,7	9,820		200. 10. 30,24	30,306	58,2	53,8	39. 29. 53,70	B.
	21 Canum Venat..	0. 54,9	56,0	51,9	53,8	54,0	54,0		+1	23. 35. 54,24				39. 29. 50,36	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10', 198, 10', 207, 10', 218, 10', 234, 10', 241 at the five wires.
 From May 11 = 10', 199, 10', 207, 10', 220, 10', 231, 10', 242. ONE REVOLUTION = 20'', 838. CORRECTION for RUNS = - 0'', 1.
 From May 11 = - 1'', 5. ZENITH POINT = 21°. 53'. 13'', 91. ASSUMED CO-LATITUDE = 37°. 47'. 8'', 28.

(a) Badly defined image. (b) The mercury was disturbed. (c) Uneven. (d) Clouds passing. (e) Unsteady. Times by M, 1h. 4m. 44s and 1h. 5m. 46s. M slow on H, 27s. (f) Without the dark glass. (g) Times by M, 1h. 3m. 10s and 1h. 4m. 0s. H fast on M, 28s. (h) Without the dark glass: very faint. (i) Quite alone. (k) 'The following and rather the larger of two.' (l) Rather faint.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
May 13	η Ursæ Majoris R.	1. 17,7	17,1	14,1	15,2	16,5	15,1	11,239	+1	199.45.54,68	30,306	57,4	52,4	39.54.29,69	B.
	η Ursæ Majoris...	0. 31,3	30,0	27,6	28,9	28,7	30,2		+2 $\frac{3}{4}$	24. 0.30,79				39.54.27,34	B.
	α Draconis R.....	3. 13,2	12,2	9,8	9,9	11,0	11,1	12,338		214.47.26,89		57,0	51,6	24.52.41,81	B.
	α Draconis	3. 62,1	60,2	58,9	60,0	60,0	60,8			8.59. 0,13				24.52.41,01	B.
	(a) Piazzì XIV. 148..	0. 58,2	54,3	52,1	54,1	54,1	55,7			21.50.54,70	30,304	55,4	49,5	37.44.49,04	B.
	(b) Σ 1879.....	1. 23,1	21,6	17,6	18,9	18,1	21,1			63.46.20,00				79.41. 7,36	B.
	β Libræ R.....	4. 13,1	11,1	11,0	9,8	10,9	11,1	11,491		140.53.44,46	30,500	54,9	48,4	98.48.24,20	B.
	β Libræ	2. 44,5	41,8	40,7	41,1	41,1	42,9		+1	82.52.41,86				98.48.22,70	B.
	(c) B. xv. 358.....	2. 60,0	57,2	55,4	56,1	56,0	59,1		+2 $\frac{1}{4}$	68.17.57,23				84.12.53,78	B.
	Σ 1956.....	0. 60,1	56,9	54,9	56,2	55,0	58,2			31.45.56,83	30,296	54,5	48,1	47.40. 1,53	B.
	Σ 1963. <i>sf.</i>	3. 54,7	51,4	49,8	50,6	50,7	53,9		+2	43.28.52,01				59.23. 9,85	G.
	Σ 1973. <i>sf.</i>	0. 9,9	6,9	4,8	5,8	3,8	7,1			37.10. 6,38				53. 4.16,95	G.
	Σ 1977. <i>sf.</i> or <i>sp.</i>	4. 29,9	25,8	24,9	23,9	24,0	27,9			48. 9.25,85				64. 3.49,48	G.
	(d) Pallas	2. 46,1	41,1	41,0	40,2	40,2	43,9			48.42.41,95		53,4	47,2	64.37. 6,35	B.
	Ceres.....	2. 45,9	40,9	41,9	41,6	42,0	42,3			88.12.42,30				104. 8.51,32	B.
May 15	(e) Venus N.L.....	3. 48,2	46,9	44,9	46,0	45,1	45,6		+4 $\frac{1}{2}$	47.53.47,53	30,314	54,8	53,9	63.48.10,50	B.
	Venus S.L.....	...	...	...	...	...	...	9,111	+4 $\frac{1}{2}$	47.54.11,72				63.48.34,69	B.
	Σ 1606.....	0. 24,2	22,9	20,8	21,8	20,9	23,1			33.20.22,30	30,312	49,6	46,5	49.14.28,73	B.
	Σ 1619. <i>sf.</i>	3. 4,9	3,2	2,9	3,8	1,2	3,1			80.28. 3,33				96.23.34,83	B.
	(f) Arcturus R.....	0. 28,8	23,9	26,2	25,1	25,1	26,0	9,627		169.40.38,39	30,304	47,2	42,4	70. 0.21,59	B.
	Arcturus	0. 52,3	49,2	47,0	49,9	47,6	50,1		+1 $\frac{1}{2}$	54. 5.49,50				70. 0.21,66	B.
	(g) ζ Herculis R. ...	1. 20,7	18,3	18,1	16,3	16,9	17,1	11,511		195.55.51,23	30,276	48,0	44,4	43.44.37,19	B.
	ζ Herculis	0. 42,1	38,7	38,1	38,1	36,9	40,1			27.50.39,03				43.44.39,63	B.
	ι Herculis R.....	1. 14,9	13,0	12,5	11,1	10,2	10,9	11,070		195.45.54,63	30,258	46,4	40,5	43.54.34,01	B.
	ι Herculis	0. 40,0	34,9	35,2	34,0	32,8	37,0		+1	28. 0.35,84				43.54.36,66	B.
	Σ 2224. <i>s.</i>	2. 57,6	51,9	52,1	50,8	49,1	53,7			34.42.52,68				50.37. 0,75	B.
	(h) \odot S.L.....	1. 31,6	34,1	29,2	33,9	31,5	32,0	14,859		55. 9.55,63	30,108	53,4	58,5	71. 4.27,85	B.
	\odot N.L.....	3. 18,4	17,9	16,9	16,1	16,9	16,7			54.38.17,32				70.32.48,79	B.
	(i) Pallas.....	4. 63,9	59,1	58,1	60,0	60,1	60,6		+ $\frac{1}{2}$	48.25. 0,35	29,900	51,6	47,6	64.19.23,96	B.
May 16	Ceres.....	4. 18,4	14,5	15,0	15,1	14,9	16,1		+4 $\frac{1}{2}$	88.14.15,10				104.10.23,42	B.
	η Draconis R. ...	2. 22,0	20,0	17,1	18,1	21,2	20,9	10,600		211.32.12,25	29,898	51,3	47,4	28. 7.59,97	B.
	η Draconis	4. 17,8	13,2	15,8	14,4	15,3	17,1		+1	12.14.16,10				28. 8. 0,50	B.
	ζ Herculis R. ...	3. 13,4	12,9	12,4	13,7	12,0	15,0	8,191		181.33.55,86	29,894	51,2	47,6	58. 6.48,02	B.
	ζ Herculis.....	2. 32,5	28,9	28,6	29,7	30,0	31,8			42.12.30,38				58. 6.46,44	B.
	ζ Herculis R. ...	1. 20,0	18,2	17,0	17,3	19,2	18,1	11,669		195.55.48,34	29,892	50,9	47,4	43.44.39,96	B.
	ζ Herculis	0. 40,1	36,9	36,0	36,1	37,9	38,2		+1	27.50.37,73				43.44.38,21	B.
	(k) Σ 1734.....	4. 27,9	24,5	25,0	26,1	24,8	27,8			70.19.26,23	29,902	48,7	37,2	86.14.28,02	G.
	(l) Σ 1847. <i>nf.</i>	4. 42,2	35,6	39,0	36,9	35,6	39,0			83.34.38,28	29,890	43,5	37,0	99.30.23,35	G.
	β Coronæ Bor. R.	4. 23,5	18,1	21,0	19,1	18,9	22,1	9,889		179.19.27,74	29,880	41,5	35,9	60.21.19,37	B.
	β Coronæ Borealis	1. 63,1	59,6	59,1	58,9	58,0	61,2			44.27. 0,08				60.21.19,37	B.
	(m) Σ 1985.....	1. 59,0	55,1	56,2	56,1	55,0	56,9			75.46.56,48	29,882	42,0	35,6	91.42.12,98	B.
	η Draconis R.....	2. 22,2	17,8	17,9	16,1	15,9	20,7	10,407		211.32.14,82	29,876	41,2	34,8	28. 7.57,15	B.
	η Draconis	4. 18,9	15,1	17,7	13,9	14,4	17,1		+1 $\frac{1}{2}$	12.14.17,04				28. 8. 1,19	B.
May 17	(n) ζ Herculis R.....	3. 26,7	22,9	25,0	23,9	22,0	27,0	8,609		181.33.58,49			34,4	58. 6.45,98	B.
	ζ Herculis.....	2. 33,8	30,0	30,9	29,9	29,1	31,9			42.12.31,05				58. 6.47,70	B.
	(o) \odot S.L.....	4. 22,2	22,9	19,7	21,0	21,9	24,1	13,822		54.43. 7,29	29,898	46,9	47,9	70.37.39,42	B.
	(d) Σ 1619. <i>sf.</i>	3. 4,8	4,8	2,1	5,2	3,0	4,8		+3	80.28. 4,12	29,968	47,8	41,5	96.23.35,53	B.
	(p) Σ 1690	0. 60,8	57,0	56,9	57,1	56,2	58,9			78. 5.57,87		44,9	40,7	94. 1.21,02	B.
	(q) Σ 1879	1. 22,7	21,1	19,5	19,9	19,8	22,1		+1 $\frac{1}{2}$	63.46.20,98	29,964	45,1	42,3	79.41. 8,53	B.
	Pallas.....	1. 21,4	20,6	17,7	19,9	17,1	22,1	13,911	+1 $\frac{1}{4}$	48.15. 3,64	29,958	45,0	41,6	64. 9.27,46	B.
	(d) ζ Herculis R. ...	1. 25,9	23,9	22,0	22,7	23,0	24,1	11,758		195.55.51,78	29,954	44,0	41,9	43.44.36,61	B.
	ζ Herculis.....	0. 40,2	38,1	36,2	37,1	38,1	39,1		+1	27.50.38,33				43.44.38,90	B.
	(d) h^1 Draconis R. ...	3. 16,1	15,1	12,2	13,9	14,1	15,1	12,459		215. 2.28,08	29,956	44,1	42,0	24.37.40,24	B.
	(r) h^1 Draconis.....	4. 3,6	0,6	2,3	1,0	1,9	1,9		+2	8.44. 3,39				24.37.43,89	B.
	(s) \odot S.L.....	3. 26,5	29,7	23,1	26,9	28,0	28,0	12,619	+3	54.17.39,01	29,942	53,9	54,8	70.12.10,06	B.
	\odot N.L.....	0. 58,6	60,6	55,4	60,1	59,1	58,1		+4 $\frac{1}{2}$	53.46. 0,49				69.40.30,80	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',199, 10',207, 10',220, 10',231, 10',242 at the five wires.
 From May 15 = 10',207, 10',215, 10',228, 10',239, 10',250. ONE REVOLUTION = 20',838. CORRECTION for RUNS = - 1'',5.
 From May 15 = + 1'',5. ZENITH POINT = 21°.53'.13'',91. ASSUMED CO-LATITUDE 37°.47'.8'',28.

(a) Observed as single: very close. (b) Appeared double, but was observed as single. (c) Noted to be of the 7th Mag. (d) Faint.
 (e) Time of bisection delayed by a cloud. (f) Flaring. (g) Faint: clouds passing. (h) Fringed and unsteady. (i) Very faint. No
 correction for Runs. (k) Badly defined. (l) The minutes were carefully noted. (m) Probably the *sf.* star: see June 29.
 (n) Very indefinite. (o) N.L. clouded. (p) No other near. (q) Clouds passing: not seen double, the night too unfavorable. (r) Scarcely
 visible. (s) Hurried: clouds passing.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.		Observer.		
		A	B	C	D	E	F					Int.	Ext.	°	°		°	°
		"	"	"	"	"	"					r.	Inch.					
May 20	Venus S.L..... Venus N.L.....	4. 54,0 ...	54,0 ...	51,0 ...	52,3 ...	54,0 ...	53,9 ...	11,561		48. 24. 53,45 48. 24. 25,67	29,944	54,7	55,1	64. 19. 16,66 64. 18. 48,88	B. B.			
May 21	(a) Venus N.L..... Venus S.L.....	2. 3,9 ...	2,1 ...	0,2 ...	1,1 ...	1,0 ...	2,2 ...	8,959	+ $\frac{3}{4}$ + $\frac{1}{4}$	48. 32. 1,81 48. 32. 28,45	29,938	52,0	60,3	64. 26. 24,86 64. 26. 51,50	B. B.			
May 23	Venus N.L..... Venus S.L.....) N.L.....) N.L.....) N.L..... (b)) N.L.....) N.L..... o Leonis..... H. C. 23132.....	3. 38,9 ... 4. 56,0 4. 30,8 3. 59,0	38,0 ... 59,1 33,2 55,9	34,8 ... 53,0 27,9 52,1	36,0 ... 58,6 33,5 55,2	39,3 ... 58,4 31,7 54,2	37,2 ... 57,7 31,5 58,1	8,899 10,779 10,540 10,409 10,184 10,184	-2 -1 +1 +2 +2	48. 48. 37,55 48. 49. 5,27 61. 54. 51,62 61. 54. 53,67 61. 54. 53,63 61. 54. 54,42 61. 54. 52,92 63. 29. 31,79 48. 13. 55,95	30,076 30,074 30,068	61,0 62,1 62,2	68,5 66,7 65,7	64. 43. 0,61 64. 43. 28,33 77. 49. 33,57 77. 49. 35,62 77. 49. 35,58 77. 49. 36,37 77. 49. 34,87 79. 24. 16,55 64. 8. 19,38	B. B. B. B. B. B. B. G. B.			
May 24	⊙ S.L..... (c) ⊙ N.L..... (d) Venus S.L..... Venus N.L..... o Leonis.....) N.L.....) N.L.....) N.L.....) N.L.....) N.L.....	1. 23,0 4. 14,8 3. 6,0 ... 4. 31,0 3. 16,1	24,9 14,2 4,9 ... 31,3 16,9	20,4 11,1 2,0 ... 26,3 12,8	23,0 12,9 4,2 ... 29,3 16,0	23,5 13,9 4,9 ... 30,2 15,0	23,9 14,7 5,0 ... 31,1 15,9	11,810 11,545 11,320 11,140 11,018 10,845 10,731	+2 -2 -1 +1 +2	53. 30. 50,22 52. 59. 14,23 48. 58. 4,62 48. 57. 37,19 63. 29. 30,03 66. 32. 59,25 66. 32. 59,72 66. 32. 59,12 66. 32. 59,61 66. 32. 58,89	30,016 29,988 29,970 29,966	54,9 56,0 54,8 54,6	55,7 56,2 54,5 53,5	69. 25. 20,20 68. 53. 43,48 64. 52. 28,50 64. 52. 1,07 79. 24. 15,77 82. 27. 50,89 82. 27. 51,36 82. 27. 50,76 82. 27. 51,25 82. 27. 50,53	B. B. B. B. B. B. B. B. B.			
May 25	⊙ N.L..... ⊙ S.L..... Venus N.L..... Venus S.L..... o Leonis.....) N.L.....) N.L.....) N.L.....) N.L.....) N.L..... η Draconis R..... η Draconis..... (c) ζ Herculis R..... ζ Herculis..... (e) β xvi. 878.....	4. 17,0 4. 58,9 1. 59,9 ... 3. 60,0 2. 41,9 2. 27,6 4. 15,9 3. 18,8 2. 31,6 2. 61,9	18,9 60,9 60,1 ... 60,5 41,1 23,8 12,2 16,8 27,1 59,1	15,6 57,4 55,9 ... 58,2 37,8 21,5 13,1 15,1 27,1 58,9	16,2 59,1 60,6 ... 60,6 41,7 23,1 12,0 17,1 27,9 59,9	16,9 60,0 59,2 ... 59,2 40,0 22,2 13,0 15,5 28,1 58,0	17,5 59,0 58,1 ... 60,8 41,1 24,7 13,7 18,1 28,1 60,0	12,780 8,851 11,089 10,898 10,757 10,580 10,399 10,632 8,187	-2 -1 +1 +2	52. 48. 24,01 53. 19. 59,40 49. 6. 59,03 49. 7. 27,75 63. 59. 0,03 71. 42. 29,65 71. 42. 30,14 71. 42. 29,69 71. 42. 29,99 71. 42. 30,37 211. 32. 15,50 12. 14. 13,75 181. 33. 59,72 42. 12. 28,82 70. 47. 59,75	30,020 30,026 30,046 30,048 30,070 30,072	54,3 56,9 52,8 52,2 46,1 43,5	57,1 58,4 50,9 50,4 43,4	68. 42. 52,92 69. 14. 29,03 65. 1. 23,01 65. 1. 51,73 79. 53. 47,18 87. 37. 33,23 87. 37. 33,72 87. 37. 33,27 87. 37. 33,57 87. 37. 33,95 28. 7. 56,59 28. 7. 58,02 58. 6. 44,47 58. 6. 45,19 86. 43. 2,25	B. B. B. B. B. B. B. B. B. B. B. B. B. B. B.			
May 27	β Virginis..... η Virginis.....) N.L.....) N.L.....) N.L.....) N.L.....) N.L..... ψ Virginis..... 53 Virginis..... (f) Σ 1737..... B. xiii. 375..... η Ursæ Majoris R..... η Ursæ Majoris... (g) Σ 1804. s..... (h) γ Bootis R..... γ Bootis..... (i) Piazzi XIV. 148.. i Bootis R..... i Bootis.....	1. 38,7 3. 5,3 0. 29,0 2. 26,9 0. 23,9 0. 24,9 3. 7,1 1. 22,8 0. 30,1 4. 22,2 0. 30,1 1. 22,4 0. 55,9 1. 24,8 0. 15,1	36,8 4,4 28,1 24,8 21,0 23,1 2,9 21,9 28,0 19,0 19,8 19,8 52,9 25,0 13,8	33,9 2,7 26,0 24,1 20,5 20,0 3,9 19,9 26,7 18,9 17,8 17,6 49,5 20,9 11,7	37,0 4,3 29,8 26,0 20,2 23,1 4,8 20,8 27,2 17,8 19,0 19,8 53,1 25,8 14,8	37,1 3,1 28,0 24,8 21,0 21,9 4,5 20,8 27,1 19,0 22,1 50,7 23,1 11,9	37,9 5,3 29,7 26,9 21,2 24,9 5,9 29,1 29,1 21,9 22,1 54,1 26,1 15,1	11,550 11,339 11,213 11,048 10,840 14,151 9,900 11,279 11,279 11,235 10,760	+4 $\frac{1}{2}$ -2 -1 +1 +2 +1 $\frac{1}{2}$ +2 $\frac{1}{4}$ + $\frac{1}{2}$ +2 +1 +1	71. 26. 57,11 73. 53. 4,30 82. 40. 7,85 82. 40. 8,75 82. 40. 7,95 82. 40. 7,87 82. 40. 8,65 82. 46. 3,95 89. 25. 21,32 55. 30. 30,29 81. 8. 4,97 199. 45. 59,43 24. 0. 28,96 52. 9. 19,97 188. 40. 8,49 35. 6. 20,49 21. 50. 52,92 197. 56. 13,26 25. 50. 13,92	30,118 30,120 30,122 30,124 30,122	49,9 49,2 48,3 46,8 46,5 46,9 46,5 46,9 46,5 46,2 41,9	48,0 44,6 44,0 43,8	87. 21. 40,54 89. 48. 14,24 98. 35. 47,78 98. 35. 48,68 98. 35. 47,88 98. 35. 47,80 98. 35. 48,58 98. 41. 44,37 105. 21. 38,32 71. 25. 4,13 97. 3. 38,95 39. 54. 24,96 39. 54. 25,53 68. 3. 49,04 51. 0. 27,68 51. 0. 28,84 37. 44. 47,26 41. 44. 13,05 41. 44. 12,41	B. B. B. B. B. B. B. B. B. B. B. B. B. B. B. B. B. B. B.			

MICROMETER READING for COINCIDENCE with fixed Wire = 10',207, 10',215, 10',228, 10',239, 10',250 at the five wires.
 From May 23 = 10',208, 10',216, 10',229, 10',240, 10',251. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = + 1'',5.
 From May 24 = + 1'',1. ZENITH POINT = 21°. 53'. 13'',91. ASSUMED Co-LATITUDE = 37°. 47'. 8'',28.

(a) Clouds. (b) Appeared to be on the fixed wire. The micrometer-wire was placed too near the fixed wire. (c) Frequently obscured by clouds.
 (d) Unsteady. (e) The pointer reading, which was set down 79°. 40', has been altered conjecturally. (f) Quite alone. (g) 'A star of about 1' less N.P.D. preceded about 20s.' (h) Badly defined. (i) 'Quite alone.' The pointer reading has been increased 5'.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	o	o	o	
May 27	♄ Draconis R.	1. 30,1	29,1	26,1	29,8	26,1	29,1	11,392		209. 11. 4,20	30,116	45,6	41,1	30. 29. 10,33	B.
	♄ Draconis.	0. 25,2	24,9	22,3	23,2	22,2	24,2			14. 35. 23,68				30. 29. 10,39	B.
	(a) Σ 298.	1. 52,1	50,1	47,8	48,9	47,8	50,3		+1 1/2	33. 46. 49,85	30,112	45,1	40,8	49. 40. 56,82	B.
	Ceres.	2. 48,8	45,2	44,0	47,1	44,9	47,9		+4 3/4	88. 22. 45,60				104. 18. 56,68	B.
May 31	(b) ☉ N.L.	1. 20,0	22,9	21,0	22,9	23,9	23,0	10,770		51. 51. 10,90	29,990	57,6	61,8	67. 45. 38,56	B.
	☉ S.L.	2. 42,1	45,6	43,9	43,0	45,8	45,2		+4 1/2	52. 22. 45,87				68. 17. 14,23	B.
	Venus N.L.	1. 23,9	24,6	21,0	21,3	24,7	25,2			50. 11. 23,42	29,974	58,9	63,3	66. 5. 48,80	B.
	Venus S.L. ....	...	...	...	...	...	...	8,829		50. 11. 52,52				66. 6. 17,90	B.
	(c) Σ 1776. sf.	1. 25,2	21,2	20,9	19,2	21,9	25,0	12,907		27. 5. 26,31	30,002	53,1	49,1	42. 59. 26,40	B.
	(d) γ Bootis R.	0. 24,2	21,1	22,9	18,9	22,1	24,2	10,961	+1	188. 40. 6,98	30,000	50,1	45,2	51. 0. 28,70	B.
	γ Bootis.	1. 20,1	17,5	17,6	14,9	18,2	20,9		+2 3/4	35. 6. 19,09				51. 0. 27,71	B.
	α Serpentis R.	0. 24,9	20,0	20,0	18,0	22,0	23,0	7,040	+1	156. 36. 27,89	29,998	48,7	44,0	83. 4. 53,64	B.
	(e) α Serpentis.	4. 62,1	59,5	58,9	57,0	59,9	61,9		+3	67. 10. 0,05				83. 4. 54,52	B.
	Ceres.	2. 20,9	17,0	18,1	16,6	17,8	20,9			88. 27. 18,48				104. 23. 29,00	B.
	β ¹ Scorpii.	0. 44,9	41,0	40,1	40,0	40,9	42,3			93. 25. 41,52	29,994	49,0	45,2	109. 22. 31,37	B.
June 1	(f) ☉ N.L.	3. 29,8	32,1	28,0	28,0	31,0	31,9	11,740		51. 42. 58,54	29,968	59,9	62,8	67. 37. 25,93	B.
	☉ S.L.	4. 33,0	34,9	31,8	31,6	33,4	34,7			52. 14. 33,10				68. 9. 1,19	B.
	Venus N.L.	3. 19,9	21,1	17,2	19,1	22,3				50. 23. 19,48	29,946	61,5	63,7	66. 17. 45,06	B.
	Venus S.L. ....	...	...	...	...	...	...	8,742		50. 23. 50,48				66. 18. 16,06	B.
June 5	(g) ☉ N.L.	4. 26,4	26,1	23,2	22,2	26,8	26,9	11,271		51. 14. 3,49	29,886	65,8	73,1	67. 8. 29,51	B.
	☉ S.L.	0. 32,3	32,5	28,9	29,7	32,9	33,0			51. 45. 31,55				67. 39. 58,25	B.
June 7	(h) Pallas.	2. 30,2	25,2	24,2	25,1	25,3	29,1	12,191	+4 1/2	47. 51. 47,65	29,852	60,3	57,0	60. 46. 10,35	B.
	Ceres.	2. 33,9	27,9	27,9	26,8	28,0	30,4		+2 1/2	88. 37. 28,76				104. 33. 36,12	B.
	Piazzi XV. 220.	3. 32,8	28,1	26,7	24,8	26,9	30,1			70. 13. 28,08	29,854	59,7	56,6	86. 8. 27,28	B.
	Σ 2007. sf.	0. 33,1	29,0	27,6	26,4	28,1	31,9			60. 20. 29,33				76. 15. 9,66	B.
	τ Herculis R.	1. 22,4	20,1	17,9	17,2	17,8	20,0	9,121		196. 21. 42,09	29,858	58,9	56,1	43. 18. 45,28	B.
	τ Herculis.	4. 48,8	42,7	41,9	40,9	42,4	45,9		+1 1/2	27. 24. 43,93				43. 18. 44,24	B.
	22 Scorpii.	3. 11,1	8,3	5,7	3,6	5,2	7,9			98. 48. 6,83				114. 46. 3,71	B.
	52 Herculis R.	1. 23,9	20,7	18,8	18,1	18,8	22,1	11,381		195. 55. 56,14		58,4	55,7	43. 44. 31,67	B.
	52 Herculis.	0. 33,9	29,5	28,4	27,7	28,0	32,7			27. 50. 30,02				43. 44. 30,77	B.
	h ¹ Draconis R.	3. 26,1	23,1	20,0	20,7	21,7	24,0	12,502	+1 1/4	215. 2. 34,67				24. 37. 33,69	B.
	h ¹ Draconis.	3. 56,8	51,2	52,0	51,9	50,6	54,8		+3	8. 43. 55,68				24. 37. 36,98	B.
	v ¹ Draconis R.	3. 24,3	21,9	19,0	18,2	19,8	23,1	11,601		204. 57. 52,12	29,864	57,8	56,0	34. 42. 26,60	B.
June 8	v ² Draconis.	4. 20,1	15,9	16,2	13,9	13,0	19,1			18. 49. 16,18				34. 43. 7,85	B.
	(i) ☉ S.L.	4. 17,9	16,0	14,9	14,2	17,0	18,9	14,070	+1	51. 27. 56,42	30,002	65,9	71,0	67. 22. 22,99	B.
	☉ N.L.	1. 25,0	24,0	20,9	22,0	23,9	23,8		+2 1/2	50. 56. 23,75				66. 50. 49,65	B.
	(k) θ Draconis R.	4. 24,1	20,8	19,0	17,8	19,1	22,7	10,441	+1 3/4	208. 39. 15,44	29,954	59,8	54,5	31. 0. 59,50	B.
	θ Draconis.	2. 12,6	8,9	8,9	7,5	7,9	12,0		+3	15. 7. 11,78				31. 0. 59,66	B.
	(l) τ Herculis R.	1. 28,0	25,8	22,9	22,2	23,9	26,1	9,396		196. 21. 41,92		59,5	54,2	43. 18. 45,49	B.
	τ Herculis.	4. 48,1	44,0	41,9	40,9	43,4	47,0			27. 24. 44,02				43. 18. 44,37	B.
	(m) λ Ophiuchi.	0. 18,2	14,5	12,3	12,1	12,2	16,7		+1	71. 45. 14,32	29,948	59,1		87. 40. 17,63	B.
	(c) g Draconis R.	3. 27,6	25,1	22,0	20,9	22,0	25,1	10,531		214. 33. 17,15		59,0	54,4	25. 6. 51,65	B.
	g Draconis.	3. 14,1	10,9	10,3	8,9	10,9	14,0			9. 13. 11,38				25. 6. 53,12	B.
June 10	Venus N.L.	2. 22,0	21,8	19,0	20,6	20,5	22,1		+4 1/2	52. 22. 21,32	29,976	65,7	68,0	68. 16. 49,24	B.
	Venus S.L. ....	...	...	...	...	...	...	8,654	+4 3/4	52. 22. 54,89				68. 17. 22,81	B.
	(n) Polaris SP. R.	1. 27,9	23,5	22,9	22,2	23,7	26,9	11,551		241. 10. 56,89	30,002	63,8	61,5	-1. 31. 21,82	B.
	Polaris SP.	0. 28,5	24,1	24,9	25,2	25,6	27,1			342. 35. 25,48				-1. 31. 26,51	B.
	γ Bootis R.	0. 26,1	22,9	21,5	21,8	21,8	23,9	10,909		188. 40. 8,62	30,036	61,8	58,5	51. 0. 26,71	B.
	γ Bootis.	1. 21,0	16,0	15,1	15,0	16,1	19,0			35. 6. 16,98				51. 0. 25,25	B.
	56 Hydræ.	0. 25,4	22,0	22,0	21,1	22,0	23,1	17,459		99. 27. 51,72				115. 26. 1,52	B.
	(o) Σ 1884.	4. 38,7	35,6	35,1	34,0	35,8	39,4		+1 1/4	49. 4. 36,34	30,040	61,2	57,9	64. 59. 0,69	B.
	i Bootis R.	1. 29,9	26,4	24,1	26,3	26,8	29,3	10,740		197. 56. 16,23	30,046	60,0	56,9	41. 44. 9,57	B.
	i Bootis.	0. 12,4	9,3	7,9	7,6	9,1	11,0			25. 50. 9,53				41. 44. 8,27	B.
	(p) i Draconis R.	1. 30,1	27,7	24,9	26,8	26,3	27,8	11,169	+1	209. 11. 7,39		60,2	55,5	30. 29. 7,00	B.
	i Draconis.	0. 22,2	17,2	15,6	16,9	17,7	19,5		+2	14. 35. 19,19				30. 29. 6,52	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10', 208, 10', 216, 10', 229, 10', 240, 10', 251 at the five wires. From May 31 = 10', 205, 10', 215, 10', 225, 10', 236, 10', 248. From June 1 = 10', 209, 10', 219, 10', 229, 10', 240, 10', 252. From June 7 = 10', 200, 10', 210, 10', 220, 10', 231, 10', 243. ONE REVOLUTION = 20'', 838. CORRECTION for RUNS = + 1'', 1. From May 31 = - 0'', 9. From June 5 = - 0'', 4. From June 7 = - 1'', 3. ZENITH POINT = 21° . 53' . 13'', 91. From May 31 = 21° . 53' . 13'', 53. ASSUMED CO-LATITUDE = 37° . 47' . 8'', 28.

(a) 'A star of less N.P.D. by 1'. 40" precedes this 10": neither was seen double.' (b) Often obscured by clouds. (c) Faint. (d) The micrometer reading has been increased by 1". (e) No correction for Runs. (f) Much fringed. (g) Clouds passing. (h) Doubtful. (i) Great waving. (k) Faint from clouds. (l) Indefinite. (m) Observed as single: frequently obscured by clouds. (n) Mercury unsteady. Times by M. 13^h. 3^m. 35^s and 13^h. 4^m. 30^s. H fast on M, 25°. (o) Observed as single. (p) Mercury unsteady.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle Reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
June 10	(a) Ceres.....	2.45,1	40,8	40,9	39,2	41,8	43,9	7,582	+3	88.42.41,41	30,052	59,8	54,8	104.38.50,82	B.
	κ Herculis. <i>sp.</i>	2.31,3	25,9	26,1	25,2	28,6	29,9			56.37.27,73	30,058	59,1	54,6	72.32.2,72	B.
	(b) ζ Ophiuchi R.....	1.29,2	25,9	24,9	24,7	26,0	27,1		+2½	139.27.21,96	30,060	58,9	54,0	100.14.50,70	B.
	ζ Ophiuchi.....	4.6,7	2,1	3,4	2,9	3,7	4,5		+4½	84.19.3,17				100.14.48,77	B.
	Σ 2104.....	3.60,7	54,0	54,3	52,2	55,9	57,9		+1	37.53.55,78	30,062	58,0	51,1	53.48.7,31	B.
June 11	(c) Venus N.L.....	1.33,0	32,0	28,1	30,4	33,0	31,8	8,550		52.36.31,32	30,138	67,0	73,9	68.30.59,35	B.
	Venus S.L.....	...	...	...	...	...	...			52.37.6,12				68.31.34,15	B.
	(d) Σ 1898.....	0.46,6	41,1	41,8	42,0	43,8	44,0		+1½	14.10.43,77	30,116	63,7	62,1	30.4.30,76	B.
	(a) Mercury, centre ..	3.25,2	23,8	21,9	19,9	24,4	24,1			57.23.23,07	30,126	67,7	70,3	73.17.58,03	B.
June 12	(e) ⊙ S.L.....	1.26,9	26,5	21,8	23,6	26,0	25,8	14,001		51.10.6,24	30,114	69,8	73,8	67.4.32,37	B.
	⊙ N.L.....	3.35,9	35,8	31,9	33,1	35,2	35,2			50.38.34,37				66.32.59,83	B.
	Venus S.L.....	1.26,0	25,9	20,8	23,1	25,7	25,2			52.51.24,38	30,084	71,7	75,4	68.45.52,58	B.
	(f) Venus N.L.....	...	...	...	...	...	...			52.50.50,22				68.45.18,42	B.
	(g) Mercury, centre ..	0.20,9	20,0	15,9	17,1	20,3	19,9		+1¾	57.20.19,22	29,908	72,6		73.14.53,42	B.
June 13	⊙ N.L.....	0.28,9	28,9	24,0	26,0	29,9	28,3	11,107		50.35.9,16	29,900	73,7	76,9	66.29.34,15	B.
	⊙ S.L.....	1.39,9	39,1	33,1	36,2	38,7	38,8			51.6.37,57				67.1.3,22	B.
	56 Hydræ.....	0.22,4	19,9	17,2	19,2	18,0	20,2			99.27.56,42	29,876	64,8	61,8	115.26.3,20	B.
	(h) Σ, 286.....	2.16,0	12,7	9,0	9,1	10,8	13,7	10,608	+1¾	26.52.12,28		64,3	61,9	42.46.11,99	B.
	i Bootis R.....	1.29,1	24,9	22,5	23,1	24,6	26,9			197.56.17,03	29,888	64,0	61,1	41.44.8,71	B.
	i Bootis.....	0.13,0	8,1	6,6	7,1	7,8	10,0		+1½	25.50.9,13				41.44.7,81	B.
	Pallas.....	0.21,5	15,7	13,8	14,8	14,5	18,0	11,306	+2¾	48.9.55,10	29,892	62,9	59,9	64.4.18,05	B.
	Ceres.....	3.39,1	32,1	32,9	31,9	32,3	35,8		+1	88.48.33,81				104.44.41,74	B.
	(i) θ Draconis R....	4.23,1	17,9	18,0	16,8	18,0	20,2		+½	208.39.18,76		62,6	59,0	31.0.56,26	B.
	θ Draconis.....	2.12,9	7,9	7,9	8,1	8,0	11,5	8,821	+½	15.7.10,28				31.0.58,24	B.
	τ Herculis R.....	1.17,1	12,1	11,3	11,0	11,5	13,0		+½	196.21.41,84	29,894	62,1	58,5	43.18.45,51	B.
	τ Herculis.....	4.47,9	42,2	41,9	41,1	42,1	45,9		+1½	27.24.43,68				43.18.43,97	B.
	(k) Σ 3105.....	0.34,6	29,0	29,0	28,0	28,7	31,9	12,122	+2	80.45.30,11				96.40.59,41	B.
	h¹ Draconis R....	3.24,9	20,9	19,9	19,4	19,9	22,9		+3	215.2.39,33	29,896	61,0	57,1	24.37.29,05	B.
	(l) h¹ Draconis.....	3.50,9	44,9	46,1	45,8	45,1	48,6		+4½	8.43.53,29				24.37.34,61	B.
	(m) Σ 2133.....	3.35,1	28,9	30,7	28,1	28,4	32,6	12,633	+1	24.8.30,66				40.2.27,67	B.
	⊙ S.L.....	4.29,7	27,7	25,7	26,0	25,6	29,1			51.3.36,46	29,952	64,7	66,0	66.58.2,77	B.
	⊙ N.L.....	2.11,9	9,0	7,1	7,4	8,0	9,9			50.32.8,62				66.26.34,25	B.
	(n) Venus S.L.....	0.24,0	22,9	19,1	21,0	21,0	22,2	11,947		53.20.21,65	29,956	66,2	66,4	69.14.50,95	B.
	Venus N.L.....	...	...	...	...	...	...			53.19.45,63				69.14.14,93	B.
	η Ursæ Majoris R.	0.33,0	30,5	28,9	30,9	29,8	31,2	8,725		199.46.1,79	29,960	63,5	60,3	39.54.22,14	B.
June 14	η Ursæ Majoris...	0.26,7	23,0	23,0	22,2	22,4	24,5			24.0.23,58				39.54.20,45	B.
	φ Virginis.....	1.35,8	28,4	30,4	29,9	29,0	32,7	10,546	+1	75.36.30,85		63,4	59,0	91.31.43,58	B.
	(o) 56 Hydræ.....	2.56,1	49,2	52,0	49,7	49,4	51,2		+1	99.27.50,85	29,958	61,9	58,2	115.26.0,15	B.
	(p) i Bootis R.....	1.28,6	23,9	23,2	23,9	23,5	26,6		+1½	197.56.17,79	29,956	63,4	57,7	41.44.7,99	B.
	i Bootis.....	0.12,0	6,6	7,2	6,9	6,1	9,8	9,097	+2½	25.50.9,13				41.44.7,85	B.
	(a) Pallas.....	3.34,0	25,9	27,8	26,6	26,4	30,9			48.13.51,56	29,954	59,9	56,8	64.8.14,83	B.
	Ceres.....	0.42,9	35,8	38,1	37,1	37,1	30,2	10,460		88.50.38,28				104.46.47,54	B.
	(q) θ Draconis R....	4.28,1	22,2	23,2	21,6	22,1	23,9			208.39.17,96	29,948	59,7	56,0	31.0.57,00	B.
	θ Draconis.....	2.14,1	7,5	10,0	8,0	7,3	11,5	10,026	+1	15.7.9,73				31.0.57,63	B.
	(p) τ Herculis R....	1.45,9	39,2	39,8	40,1	39,1	41,3		+2¾	196.21.44,16	29,946	59,1	53,6	43.18.43,26	B.
	τ Herculis.....	4.46,1	39,7	40,0	38,0	38,9	43,0	11,720	+4½	27.24.43,63				43.18.43,99	B.
	(r) Piazzì XVI. 270..	4.22,0	15,9	17,5	14,4	15,2	18,7		+3	65.24.16,98	29,936	58,0	54,0	81.19.6,65	B.
	(s) μ Draconis. <i>sf.</i> ...	0.31,0	22,2	25,2	23,1	23,0	26,2	11,720	+3	19.25.26,96		57,9	53,8	35.19.19,22	B.
	Piazzì XVII. 58...	2.33,9	25,1	28,2	25,1	25,0	29,0		+1½	17.47.27,94		53,4		33.41.18,54	B.
	ν¹ Draconis R....	3.31,4	25,2	26,4	25,1	24,9	28,0		+1¾	204.57.55,14	29,932	57,5	53,0	34.42.23,55	B.
	ν¹ Draconis.....	3.38,9	31,6	33,4	31,2	31,3	35,4	14,049	+1¾	18.48.33,89				34.42.25,52	B.
	Σ, 295.....	1.13,2	7,7	9,0	9,1	7,0	11,0		+1½	36.41.9,61	30,024	59,7	55,6	52.35.18,73	B.
June 15	(a) Pallas.....	4.31,5	25,9	26,3	26,0	25,2	29,6			48.18.7,07		59,6	54,5	64.12.29,71	B.
	Ceres.....	2.52,4	45,2	47,9	46,6	46,6	48,1	12,640		88.52.47,47				104.48.56,99	B.
	Σ 2089.....	4.23,9	16,9	18,9	16,7	17,0	22,8		+1	48.39.18,92	30,034	58,0	53,4	64.33.42,08	B.
	h¹ Draconis R....	3.32,6	25,9	28,0	25,8	28,0	28,0			215.2.37,17	30,036	57,7	52,9	24.37.31,95	B.
	h¹ Draconis.....	3.56,0	49,9	53,1	52,1	50,2	53,4			8.43.51,98				24.37.32,20	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10",200, 10",210, 10",220, 10",231, 10",243 at the five wires. From June 14 = 10",204, 10",212, 10",219, 10",229, 10",241. ONE REVOLUTION = 20",838. CORRECTION for RUNS = -1",3. From June 14 = -3",6. ZENITH POINT = 21°.53'.13",53. From June 15 = 21°.53'.14",45. ASSUMED CO-LATITUDE = 37°.47'.8",28.

(a) Faint. (b) Indefinite. (c) Indefinite and unsteady. (d) Clouds: the small star not seen. (e) Great waving. (f) Cloudy. (g) Very unsteady. (h) No other near. (i) On fixed wire, not well bisected. (k) 'Did not appear double.' (l) Hurried. (m) The small star not seen. (n) Clouds. (o) Unsteady. (p) Mercury waving. (q) Indefinite image. (r) Not seen double. (s) Magnitudes equal.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	"	"		
June 15	(a) α Herculis R.	4.22,0	16,1	19,9	15,8	17,0	20,4	6,839	+1 $\frac{1}{4}$	164.15.28,70	30,038	57,2	52,5	75.25.38,92	B.
	α Herculis.	0.62,1	55,0	57,5	56,1	56,1	58,2		+4 $\frac{1}{2}$	59.30.58,18				75.25.36,90	B.
	ξ Draconis R.	4.49,3	36,1	44,2	38,0	38,9	41,0	11,318		206.34.17,77	30,042	56,4	51,7	33.6.0,18	B.
	ξ Draconis.	2.17,2	10,2	13,7	11,1	10,8	13,7			17.12.12,52				33.6.1,57	B.
June 17	η Ursæ Majoris R.	1.52,8	52,0	50,9	51,3	51,6	52,2	12,618		199.46.1,58	29,946	61,2	59,4	39.54.23,27	B.
	η Ursæ Majoris.	0.26,0	23,9	23,0	22,8	24,6	23,1		+1 $\frac{1}{4}$	24.0.24,46				39.54.20,41	B.
	(a) Arcturus R.	0.26,2	23,0	23,1	23,4	26,0	25,0	9,470		169.40.40,01	29,936	60,8	57,9	70.0.18,89	B.
	Arcturus.	0.47,0	44,1	42,0	43,0	45,6	44,9		+2 $\frac{1}{2}$	54.5.44,69				70.0.14,69	B.
	(b) ϕ Virginis.	1.33,9	30,5	30,1	29,4	30,8	32,3			75.36.30,98	29,934	60,7	57,5	91.31.42,95	B.
	(c) Σ 1876.	3.13,5	10,0	11,0	9,1	9,8	12,7	9,470		80.48.26,21	29,930	60,1	56,9	96.43.55,22	B.
	Σ 288.	4.48,8	44,8	45,1	43,5	44,7	47,9		+1	57.44.45,27		60,0	56,8	73.39.20,67	B.
	(d) i Bootis R.	1.28,0	26,1	24,6	26,1	25,8	27,6	10,580		197.56.18,66	29,922	59,9	56,1	41.44.8,05	B.
	i Bootis.	0.11,0	6,6	7,1	6,0	7,0	8,1			25.50.7,62				41.44.5,43	B.
	\odot S.L.	1.31,2	30,1	28,0	28,0	29,1	30,0	12,959		50.55.32,12	29,700	63,9	69,4	66.49.56,86	B.
June 18	\odot N.L.	4.7,0	5,9	5,0	3,1	6,0	6,4		+1	50.24.5,15				66.18.29,23	B.
	(b) h^1 Draconis R.	3.24,9	18,2	21,0	18,0	20,2	22,0	12,279	+1 $\frac{1}{2}$	215.2.36,99	29,680	57,0	50,6	24.37.32,23	B.
	h^1 Draconis.	3.52,2	47,9	50,0	48,1	49,2	50,9		+2 $\frac{1}{2}$	8.43.51,32				24.37.31,64	B.
	(e) α Herculis R.	4.28,0	22,9	25,7	21,9	24,1	28,0	7,140		164.15.28,73	29,682	56,8	50,4	75.25.38,55	B.
	α Herculis.	0.60,5	55,0	56,0	54,9	56,0	57,1		+2	59.30.56,63				75.25.35,01	B.
	ρ Herculis. <i>sf.</i>	3.14,1	8,8	10,9	9,7	8,3	11,9		+4 $\frac{1}{2}$	36.48.12,55				52.42.21,78	B.
	(f) v^1 Draconis R.	3.29,8	23,3	26,0	22,6	24,9	26,9	11,474	+1 $\frac{1}{2}$	204.57.58,85	29,684	56,4	50,1	34.42.20,77	B.
	v^2 Draconis.	4.15,9	10,0	12,8	10,1	11,1	14,4		+3	18.49.13,83				34.43.4,56	B.
	(g) Polaris R.	4.27,9	20,4	19,1	19,0	19,0	22,9	13,230		238.8.14,49	29,910	59,2	60,4	1.31.26,39	B.
	Polaris.	3.14,2	5,3	7,9	6,8	7,1	9,1			345.38.14,65				1.31.26,63	B.
June 21	(h) \odot N.L.	2.25,2	21,1	17,8	18,1	21,8	21,4	10,102		50.22.23,20	29,900	67,2	69,9	66.16.47,42	B.
	(i) \odot S.L.	3.53,0	47,0	44,8	46,0	48,0	48,1	10,102		50.53.50,05				66.48.14,93	B.
	γ Bootis R.	0.27,1	22,3	18,9	22,1	22,1	22,1	10,741		188.40.11,52	29,772	65,9	63,4	51.0.24,48	B.
	γ Bootis.	1.22,9	14,1	12,6	12,9	15,4	16,9		+1	35.6.15,86				51.0.22,96	B.
June 22	(k) i Bootis R.	1.23,1	17,8	13,0	15,1	16,8	17,8	10,050		197.56.20,70	29,766	64,9	62,5	41.44.5,94	B.
	\odot S.L.	0.27,0	22,0	19,0	19,1	21,9	20,8	13,710		50.54.8,85	29,754	67,0	72,8	66.48.33,41	B.
	\odot N.L.	2.44,5	40,2	36,8	37,8	40,3	40,1		+1	50.22.39,88				66.17.3,78	B.
	Venus S.L.	1.56,2	54,9	47,1	51,2	53,1	51,9			55.16.52,30	29,768	70,0	73,7	71.11.22,60	B.
	(b) Venus N.L. ....	...	...	...	...	...	...	12,117		55.16.12,72				71.10.43,02	B.
	\rangle N.L.	1.41,4	39,7	33,0	37,2	38,0	37,3	13,224	-2	75.15.42,03	29,760	70,5	74,2	91.10.50,07	B.
	\rangle N.L. ....	...	...	...	...	...	...	13,104	-1	75.15.41,04				91.10.49,08	B.
	\rangle N.L. ....	...	...	...	...	...	...	12,953		75.15.40,68				91.10.48,72	B.
	\rangle N.L. ....	...	...	...	...	...	...	12,806	+1	75.15.40,30				91.10.48,34	B.
	\rangle N.L. ....	...	...	...	...	...	...	12,621	+2	75.15.40,76				91.10.48,80	B.
	β Virginis.	1.44,2	41,1	36,0	38,2	41,1	39,9			71.26.40,00	29,756	69,9	73,5	87.21.38,66	B.
	Σ 288.	4.52,2	46,2	43,1	45,3	46,8	47,7			57.44.46,65	29,780	66,7	64,6	73.39.21,21	B.
	τ Herculis R.	1.13,0	5,1	4,2	6,1	6,9	7,0	8,183		196.21.49,41		63,7	59,4	43.18.38,83	B.
	τ Herculis.	4.48,7	37,0	37,0	37,6	39,0	41,9		+1	27.24.40,13				43.18.39,47	B.
	52 Herculis R.	1.21,9	14,6	12,0	12,1	14,0	14,9	10,883		195.56.1,00		63,4	58,0	43.44.27,69	B.
	52 Herculis.	0.31,0	26,5	23,4	24,8	24,7	28,8		+1	27.50.26,68				43.44.26,47	B.
	(l) h^1 Draconis R.	3.30,9	25,0	19,2	22,0	23,1	24,6	12,279	+1 $\frac{1}{2}$	215.2.40,41		62,9	57,5	24.37.28,95	B.
	h^1 Draconis.	3.55,2	46,1	45,6	46,8	46,1	49,2		+2 $\frac{1}{2}$	8.43.50,02				24.37.30,48	B.
June 24	(m) α Herculis R.	4.25,8	18,9	19,0	16,1	19,3	21,9	6,919	+3	164.15.29,03		62,4	56,7	75.25.37,83	B.
	α Herculis.	0.64,9	56,8	54,2	54,2	57,9	58,9		+4 $\frac{1}{2}$	59.30.58,57				75.25.36,53	B.
	\odot S.L.	1.24,8	16,0	15,1	15,8	17,0	18,1	11,324		50.55.54,68	29,634	72,7	86,3	66.50.18,37	B.
	\odot N.L.	4.30,9	23,7	21,6	22,2	24,9	26,9			50.24.24,82				66.18.47,87	B.
June 24	\rangle N.L.	3.62,0	58,2	54,0	56,0	57,2	56,9	12,110	-2	85.48.24,22	29,620	72,6	75,4	101.44.9,62	B.
	\rangle N.L. ....	...	...	...	...	...	...	11,981	-1	85.48.23,71				101.44.9,11	B.
	\rangle N.L. ....	...	...	...	...	...	...	11,847		85.48.23,23				101.44.8,63	B.
	\rangle N.L. ....	...	...	...	...	...	...	11,741	+1	85.48.22,17				101.44.7,57	B.
	\rangle N.L. ....	...	...	...	...	...	...	11,560	+2	85.48.22,65				101.44.8,05	B.
	\rangle N.L. ....	...	...	...	...	...	...								B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10',204, 10',212, 10',219, 10',229, 10',241 at the five wires.
 From June 20 = 10',203, 10',211, 10',218, 10',228, 10',240. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = -3'',6.
 From June 20 = -1'',5 ZENITH POINT = 21°.53'.14'',45. ASSUMED Co-LATITUDE = 37°.47'.8'',28.

(a) Indefinite image. (b) Unsteady. (c) Seemed double. (d) Faint from clouds. (e) Indefinite and clouded. (f) Bad definition and unsteadiness. (g) Delayed by clouds. Times by M, 1^h.10^m.27^s and 1^h.12^m.37^s. H fast on M, 1^m.31^s. (h) Faint from clouds, and too near the fixed wire. (i) Presumed to have been taken on the micrometer wire. (k) Hazy. Too near the fixed wire to be satisfactory: the direct observation was quite discordant. (l) Indistinct. (m) Too much wind for reflection observations.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		' "	" "	" "	" "	" "	" "					Inch.	" "		
June 24	Spica.....	0. 24,1	19,9	15,8	17,5	19,9	18,3			84. 25. 19,23	29,622	72,6	74,6	100. 20. 58,36	B.
	(a) Arcturus R.....	0. 33,2	27,1	23,8	27,2	29,2	28,9	9,658	+1 $\frac{1}{2}$	169. 40. 40,11	29,636	71,6	70,6	70. 0. 17,54	B.
	Arcturus.....	0. 52,0	45,9	41,1	43,1	46,2	46,0		+3	54. 5. 46,17				70. 0. 14,92	B.
	ε Bootis R.....	4. 18,4	12,2	11,9	12,4	14,1	15,0	8,428		177. 24. 51,09		70,3	67,9	62. 15. 57,01	B.
	ε Bootis.....	1. 41,9	33,8	31,6	33,1	35,1	37,1		+1	46. 21. 35,43				62. 15. 54,63	B.
	α Lyrae R.....	3. 25,9	19,0	18,1	18,9	20,0	22,0	7,791		188. 19. 11,07	29,606	65,9	61,3	51. 21. 25,28	B.
	α Lyrae.....	2. 21,6	13,5	13,5	12,7	13,7	16,0		+1 $\frac{1}{4}$	35. 27. 15,24				51. 21. 22,69	B.
June 27	(b) ⊙ N.L.....	0. 28,0	20,0	20,8	18,9	19,6	22,8	10,771		50. 30. 10,15	29,810	58,8	57,5	66. 24. 35,20	B.
	⊙ S.L.....	1. 44,8	36,6	37,0	35,9	36,0	38,1		+2	51. 1. 38,17				66. 56. 3,90	B.
	(c) ⊙ N.L.....	2. 68,1	59,9	61,0	58,9	58,7	59,1	12,917		96. 32. 4,55	29,848	55,1	51,1	112. 29. 26,63	B.
	⊙ N.L.....	...	...	...	...	...	...	12,890	+1	96. 32. 4,11				112. 29. 26,19	B.
	⊙ N.L.....	...	...	...	...	...	...	12,877	+2	96. 32. 3,28				112. 29. 25,36	B.
	α Lyrae R.....	3. 36,8	28,1	30,8	27,7	28,8	31,1	8,103	+2 $\frac{1}{2}$	188. 19. 14,25	29,850	54,2	48,4	51. 21. 22,57	B.
	α Lyrae.....	2. 20,6	11,1	13,8	10,3	10,2	12,9		+4 $\frac{1}{2}$	35. 27. 15,46				51. 21. 23,38	B.
	ο Draconis R.....	2. 21,5	13,1	13,9	11,7	11,8	13,6	9,949		208. 52. 19,76		53,9	48,5	30. 47. 55,82	B.
	ο Draconis.....	4. 18,9	9,9	12,8	9,1	9,2	12,4			14. 54. 11,83				30. 47. 58,51	B.
	B.A.C. 6530.....	3. 54,4	44,8	47,9	44,2	45,0	48,9			22. 3. 47,35	29,852	53,9	47,5	37. 57. 41,36	B.
	Σ 2489.....	3. 55,0	45,9	48,9	44,9	46,1	48,5		+2 $\frac{1}{2}$	59. 48. 48,26				75. 43. 27,65	B.
June 28	⊙ S.L.....	0. 27,1	23,7	20,2	20,8	22,0	23,0	13,096	+2	51. 4. 23,49	29,928	60,9	65,0	66. 58. 48,94	B.
	(d) ⊙ N.L.....	2. 59,5	54,9	54,0	52,9	54,4	55,4		+3	51. 32. 55,72				67. 27. 21,78	B.
	Mercury, centre..	1. 53,9	50,2	47,0	48,4	48,9	49,8			53. 26. 49,73	30,020	60,2	66,3	69. 21. 18,34	B.
June 29	(e) ⊙ N.L.....	1. 30,1	27,1	25,1	25,1	28,3	26,8	11,490		50. 36. 0,63	30,026	65,1	69,5	66. 30. 25,29	B.
	⊙ S.L.....	2. 59,9	57,2	54,0	54,2	56,9	55,7	11,490		51. 7. 29,89				67. 1. 55,23	B.
	Spica R.....	0. 30,8	27,2	23,7	26,3	27,3	28,0	8,045		139. 21. 12,53	29,998	64,9	65,9	100. 20. 58,67	B.
	Spica.....	0. 20,0	16,0	13,2	14,9	16,9	15,9		+2	84. 25. 16,04				100. 20. 58,34	B.
	η Bootis R.....	1. 19,9	15,0	13,1	15,0	16,1	17,1	8,690	+2	168. 51. 48,18	29,996	64,7	64,2	70. 49. 11,47	B.
	η Bootis.....	4. 42,2	37,1	34,0	35,1	38,0	38,9		+4 $\frac{1}{2}$	54. 54. 38,71				70. 49. 9,46	B.
	Arcturus R.....	0. 31,8	26,1	23,9	26,2	27,1	28,1	9,503		169. 40. 42,15		64,2	62,6	70. 0. 16,48	B.
	Arcturus.....	0. 50,1	45,5	40,2	43,1	45,8	45,5			54. 5. 45,05				70. 0. 14,78	B.
	(f) α Serpentes R....	0. 38,0	32,4	29,1	29,9	33,1	32,9	7,441		156. 36. 30,48	30,000	62,0	58,4	83. 4. 50,24	B.
	α Serpentes.....	4. 62,3	57,1	54,3	55,5	57,9	57,8			67. 9. 57,50				83. 4. 49,32	B.
	Σ 1985. sf.....	1. 61,8	54,4	52,9	53,0	55,8	55,5			75. 46. 55,60		57,9	61,9	91. 42. 7,55	B.
	θ Draconis R.....	4. 55,5	50,9	46,6	48,1	49,1	50,9	11,462		208. 39. 24,38		61,8	57,2	31. 0. 51,51	B.
	θ Draconis.....	2. 11,9	5,1	4,0	5,0	4,9	7,0			15. 7. 6,37				31. 0. 53,36	B.
	τ Herculis R.....	1. 38,0	33,8	28,8	30,4	31,2	32,1	9,359	+2	196. 21. 50,16		61,3	56,2	43. 18. 38,16	B.
	τ Herculis.....	4. 44,5	35,0	34,1	33,8	35,9	39,1		+4 $\frac{1}{2}$	27. 24. 40,40				43. 18. 39,82	B.
	(g) ⊙ N.L.....	1. 53,9	45,9	45,1	45,4	45,9	47,9	12,591	-2	96. 15. 54,63	29,992	59,1	55,0	112. 13. 12,39	B.
	⊙ N.L.....	...	...	...	...	...	...	12,715	-1	96. 15. 53,78				112. 13. 11,54	B.
	(h) ⊙ S.L.....	4. 53,6	46,4	47,1	44,9	48,4	48,9	12,715		96. 48. 56,29				112. 46. 21,63	B.
	⊙ S.L.....	...	...	...	...	...	...	12,791	+1	96. 48. 56,25				112. 46. 21,59	B.
	⊙ S.L.....	...	...	...	...	...	...	12,753	+2	96. 48. 58,49				112. 46. 23,83	B.
July 1	ν Sagittarii.....	3. 19,9	12,0	12,2	11,0	14,0	15,8			96. 58. 14,22	29,990	58,9	54,8	112. 55. 41,83	B.
	ο Sagittarii.....	0. 32,8	24,2	23,3	23,9	26,2	27,1			96. 0. 26,27			54,6	111. 57. 40,77	B.
	⊙ N.L.....	4. 25,8	22,1	20,7	19,8	21,7	22,5	12,647		50. 43. 31,57	29,828	62,2	66,5	66. 37. 56,37	B.
	⊙ S.L.....	4. 63,9	59,3	58,1	56,1	58,9	59,9			51. 14. 59,47				67. 9. 24,94	B.
July 10	Venus N.L.....	2. 45,9	42,0	38,6	39,8	42,1	41,9			57. 17. 41,77	29,816	64,6	69,8	73. 12. 15,29	B.
	Venus S.L.....	...	...	...	...	...	...	8,050		57. 18. 26,97				73. 13. 0,49	B.
	(i) ⊙ S.L.....	4. 11,7	8,1	6,1	6,8	7,0	8,1	11,965		52. 8. 31,19	29,910	62,2	67,4	68. 2. 58,15	B.
	⊙ N.L.....	1. 63,1	59,2	57,0	57,0	59,0	59,1		+3	51. 36. 59,14				67. 31. 25,41	B.
July 11	(k) Venus S.L.....	4. 20,9	17,1	14,8	14,9	17,1	17,9			58. 54. 16,68	29,904	64,4	69,3	74. 48. 53,07	B.
	Venus N.L.....	...	...	...	...	...	...	12,210		58. 53. 35,21				74. 48. 11,60	B.
July 12	γ Bootis R.....	0. 27,5	22,9	19,9	21,9	22,0	25,1	10,641	+ $\frac{1}{2}$	188. 40. 14,47	29,826	66,4	64,9	51. 0. 21,22	B.
	γ Bootis.....	1. 16,1	11,9	9,5	10,1	12,1	11,9		+1 $\frac{3}{4}$	35. 16. 12,19				51. 0. 19,56	B.
July 12	(l) ⊙ S.L.....	0. 42,3	37,8	33,9	34,7	36,9	36,5	13,030	+4 $\frac{1}{2}$	52. 24. 40,01	29,830	63,5	62,1	68. 19. 7,58	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',203, 10',211, 10',218, 10',228, 10',240 at the five wires. From June 28 = 10',204, 10',212, 10',219, 10',229, 10',241. From July 10 = 10',205, 10',213, 10',220, 10',230, 10',242. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = -1'',5. From June 28 = +0'',6. From July 10 = -3'',0. ZENITH POINT = 21°. 53'. 14'',45. From July 10 = 21°. 53'. 14'',16. ASSUMED CO-LATITUDE = 37°. 47'. 8'',28.

(a) Badly defined. (b) Hurried. (c) Scarcely visible from cloudiness. (d) Delayed by a cloud. (e) Clouds passing. It is presumed that S.L. was taken on the micrometer wire. (f) Indefinite image. (g) Great waving. (h) Purposely on the micrometer wire. (i) Without the dark glass: worth little. (k) Faint. (l) Very much hurried.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"	r.		"	Inch.	o	o	o	
July 12	(a) Σ 2286.....	3. 42,0	34,0	35,4	34,0	35,1	37,6		+2 $\frac{1}{2}$	73. 33. 35,99	29,868	59,7	54,5	89. 28. 42,97	B.
July 14	Mercury, centre...	2. 7,1	3,8	0,7	2,0	3,6	3,4			50. 37. 3,15	29,760	65,2	68,2	66. 31. 27,93	B.
July 15	(b) Venus N.L.....	1. 54,6	51,0	46,9	49,8	50,9	50,3		+1 $\frac{1}{2}$	59. 30. 50,46	29,762	64,9	67,0	75. 25. 27,73	B.
	Venus S.L.....	...	...	...	...	...	...	7,879	+1 $\frac{1}{2}$	59. 31. 39,41				75. 26. 16,73	B.
	Dracōnis R.....	1. 23,7	18,0	16,0	18,0	17,2	19,6	10,326		209. 11. 16,20	29,836	62,5	58,8	30. 28. 58,92	B.
	Dracōnis.....	0. 17,1	11,0	9,4	9,4	11,0	11,4			14. 35. 11,52				30. 28. 58,32	B.
	(c) Σ 313.....	4. 6,8	1,9	0,3	5,9	0,9	2,9			33. 39. 2,55	29,848	60,0	54,5	49. 33. 8,68	B.
	52 Herculis R....	1. 32,1	25,7	24,1	24,6	24,8	25,8	11,151		195. 56. 6,41	29,860	59,8	55,3	43. 44. 22,03	B.
	52 Herculis.....	0. 27,3	20,1	19,2	19,0	20,0	22,1			27. 50. 21,23				43. 44. 21,35	B.
	h ¹ Draconis R....	3. 25,8	18,9	17,6	17,1	19,0	19,9	11,821		215. 2. 45,72		59,8	54,5	24. 37. 23,23	B.
	h ¹ Draconis.....	3. 49,7	43,0	43,0	42,2	43,2	44,1			8. 43. 43,67				24. 37. 24,30	B.
	μ Draconis. <i>nf.</i> ...	0. 21,9	14,2	14,9	14,0	15,1	16,7			19. 25. 16,08		59,5	54,0	35. 19. 7,71	B.
	(d) 32 Cygni R....	4. 16,9	10,7	10,8	8,1	9,9	9,8	8,032		196. 54. 55,88	29,894	56,5	49,6	42. 45. 31,63	B.
	32 Cygni.....	1. 39,3	30,9	30,9	30,1	29,5	33,0		+1 $\frac{1}{2}$	26. 51. 32,44				42. 45. 31,63	B.
	Mercury, centre...	4. 42,3	37,6	36,4	34,7	37,0	37,8			50. 44. 36,98	29,918	64,1	68,4	66. 39. 2,07	B.
	22 Scorpii.....	0. 35,8	27,8	26,9	27,1	27,8	26,9	17,050		98. 48. 6,15	29,940	59,8	54,5	114. 46. 3,83	B.
	B. xvi. 878.....	2. 60,2	52,8	52,0	51,5	52,9	53,2			70. 47. 53,37	29,944	59,1	53,4	86. 42. 53,88	B.
	(e) α Herculis R....	4. 27,8	21,7	22,1	20,7	22,0	23,8	6,778		164. 15. 33,96	29,948	58,6	52,6	75. 25. 33,23	B.
July 16	α Herculis.....	0. 59,2	50,6	50,7	50,1	51,7	52,1		+2	59. 30. 52,44				75. 25. 31,31	B.
	(f) ρ Herculis. <i>sf.</i> ...	1. 61,1	51,7	52,2	51,5	51,7	52,9	6,778		36. 48. 4,81				52. 42. 14,40	B.
	(e) α Ophiuchi R....	1. 23,9	17,2	16,8	17,5	18,1	17,9	8,221		162. 21. 59,87	29,950	58,1	53,0	77. 19. 10,41	B.
	α Ophiuchi.....	4. 35,8	27,9	27,1	25,8	28,4	30,2		+1 $\frac{1}{4}$	61. 24. 28,62				77. 19. 10,58	B.
	γ Ophiuchi R....	1. 28,9	21,5	21,9	20,8	21,9	22,8	5,899		152. 27. 52,64				87. 13. 37,46	B.
	γ Ophiuchi.....	3. 43,1	34,2	34,2	34,0	35,3	37,1		+1 $\frac{1}{4}$	71. 18. 35,82				87. 13. 37,60	B.
	Σ 341.....	4. 9,9	1,0	3,8	0,1	2,3	3,1		+1	52. 39. 2,86		57,8	51,9	68. 33. 31,59	B.
	(g) Σ 2303.....	1. 51,8	43,0	43,1	42,4	42,9	43,9			82. 6. 44,28				98. 2. 19,70	B.
	δ Ursæ Minoris R.	1. 27,9	19,3	17,9	20,1	19,9	22,2	12,539		236. 15. 32,52	29,952	57,0	50,4	3. 24. 10,03	B.
	(h) δ Ursæ Minoris...	0. 63,6	53,9	57,0	54,1	55,6	57,1			347. 30. 56,84				3. 24. 11,07	B.
	(i) Σ 2157.....	3. 28,2	18,6	20,6	18,2	20,9	23,9		+1	57. 28. 21,31	29,820	64,3	59,2	73. 22. 56,24	B.
	Σ 2166. <i>sf.</i>	3. 43,9	37,5	36,2	35,9	38,0	39,8		+2 $\frac{1}{2}$	62. 33. 38,25				78. 28. 21,37	B.
	(k) Σ 333.....	4. 38,9	31,8	32,2	31,1	32,7	34,9			63. 24. 32,97	29,818	59,1	53,8	79. 19. 18,12	B.
	July 17														
July 18	(b) Venus N.L.....	1. 63,0	57,8	55,8	55,7	57,3	56,1		+1	59. 46. 57,34	29,682	61,6	64,9	75. 41. 35,14	B.
	Venus S.L.....	...	...	...	...	...	...	7,844	+1	59. 47. 46,94				75. 42. 24,74	B.
July 20	(l) Venus N.L.....	4. 63,8	60,0	57,1	58,1	59,7	58,9		+3	59. 54. 59,82	30,098	60,5	63,4	75. 49. 38,58	B.
	Venus S.L.....	...	...	...	...	...	...	8,291	+3	59. 55. 40,51				75. 50. 19,27	B.
	η Draconis R....	2. 30,8	23,0	21,2	21,5	24,2	24,8	9,866	+1	211. 32. 31,44	30,180		56,1	28. 7. 41,11	B.
	η Draconis.....	3. 63,4	56,0	55,6	55,2	58,1	57,9		+2 $\frac{1}{2}$	12. 13. 59,34				28. 7. 43,57	B.
	(e) ζ Herculis R....	3. 28,8	21,1	21,3	21,1	22,5	23,9	7,916		181. 34. 10,95	30,188	60,1	55,7	58. 6. 33,03	B.
	ζ Herculis.....	2. 21,4	13,8	13,1	13,1	13,9	15,7			42. 12. 15,10				58. 6. 30,76	B.
	52 Herculis R....	1. 30,9	23,3	22,4	22,0	23,2	23,7	10,986		195. 56. 8,15				43. 44. 20,36	B.
	52 Herculis.....	0. 20,6	18,6	17,9	17,3	18,0	20,2		+2	27. 50. 19,38				43. 44. 19,57	B.
	(e) h ¹ Draconis R....	3. 33,5	26,9	25,3	26,1	27,9	27,7	12,061	+1 $\frac{3}{4}$	215. 2. 48,71	30,190	59,7	54,6	24. 37. 20,10	B.
	(m) h ¹ Draconis.....	3. 47,8	39,2	39,8	40,1	41,0	41,9		+3	8. 43. 44,48				24. 37. 24,97	B.
	(g) Σ 2626.....	4. 16,7	9,9	9,9	8,9	9,0	12,8			43. 59. 11,07	30,200	57,2	51,2	59. 53. 29,04	G.
	July 22														
	(n) \odot S.L.....	3. 37,1	36,1	31,0	32,9	35,9	33,7	13,148		54. 7. 33,25	30,134	68,8	79,5	70. 2. 2,30	B.
	\odot N.L.....	0. 63,1	61,9	56,2	60,0	61,0	58,5		+1	53. 35. 59,98				69. 30. 28,32	B.
	Polaris SP. R....	1. 19,9	11,1	11,7	10,9	13,6	15,5	11,001		241. 11. 1,39	30,068	68,8	78,4	-1. 31. 24,26	B.
	(o) Polaris SP.....	0. 37,2	32,2	31,3	30,1	36,2	31,9			342. 35. 28,05				-1. 31. 23,14	B.
	\gg N.L.....	1. 48,8	46,9	41,2	46,2	46,1	45,4	13,350	-2	88. 50. 46,16	30,060	68,0	77,4	104. 46. 49,85	B.
	(p) \gg N.L.....	...	...	...	...	...	...	13,139	-1	88. 50. 47,79				104. 46. 51,48	B.
	\gg N.L.....	...	...	...	...	...	...	12,990		88. 50. 47,91				104. 46. 51,60	B.
	\gg N.L.....	...	...	...	...	...	...	12,897	+1	88. 50. 46,95				104. 46. 50,64	B.
	\gg N.L.....	...	...	...	...	...	...	12,708	+2	88. 50. 47,83				104. 46. 51,52	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',205, 10',213, 10',220, 10',230, 10',242 at the five wires. From July 14 = 10',196, 10',208, 10',212, 10',224, 10',232. From July 20 = 10',200, 10',212, 10',216, 10',228, 10',236. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = - 3'',0. From July 14 = - 4'',2. From July 20 = - 0'',9. ZENITH POINT = 21°. 53'. 14'',16. ASSUMED CO-LATITUDE = 37°. 47'. 8'',28.

(a) Doubtful, the field not being sufficiently illumined. (b) Clouds passing. (c) Observed as single: no other star in the field. (d) Clouded and indistinct. (e) Indefinite. (f) Supposed to be taken on the micrometer wire as left in the preceding observation. (g) Not seen double. (h) Times by M, 18^h. 22^m. 19^s and 18^h. 23^m. 16^s. M fast on 11. 20^m. 7^s. (i) A smaller preceded. (k) No other star in the field. (l) Unsatisfactory from clouds. No correction for Runs. (m) The readings set down for Microscopes E and F were 27,9, 27,7 in the direct, and 41,0, 41,9 in the reflexion observation. (n) Much fringed and very unsteady. (o) Times by M, 13^h. 12^m. 12^s and 13^h. 13^m. 12^s. M fast on 11. 19^m. 5^s. (p) Not good.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
July 22	(a) δ Ursæ Minoris R.	1.46,8	40,9	37,7	39,5	43,1	42,2	13,303		236.15.37,30	30,036	65,0	61,5	3.24. 6,02	B.
	δ Ursæ Minoris...	0.57,4	50,6	50,3	51,9	52,9	53,1			347.30.53,02				3.24. 8,02	B.
	α Draconis R.....	2.41,0	36,0	32,6	34,9	36,7	36,2	10,698	+ $\frac{1}{2}$	208.52.26,16				30.47.49,27	B.
	α Draconis.....	3.65,2	58,8	58,8	58,2	60,1	61,9		+2	14.54. 1,39				30.47.48,50	B.
	Σ 2450.....	3.45,8	37,1	36,8	36,1	39,2	41,0			22. 3.39,22		64,7	60,7	37.57.33,51	B.
	53 Draconis R....	1.25,1	19,3	15,9	18,1	20,5	20,4	10,469		206.16.14,58				33.24. 3,47	B.
	53 Draconis.....	0.20,0	12,4	11,4	10,9	13,8	13,8		+1 $\frac{1}{4}$	17.30.14,06				33.24. 3,79	B.
	Σ 2671. sf.....	1.20,3	12,1	12,0	12,2	13,2	14,9			19.11.14,08	30,030	63,0	58,6	35. 5. 5,49	B.
	(b) \odot N.L.....	3.32,1	33,8	25,4	29,0	32,1	28,2	11,050		53.48.12,62	29,970	69,0	80,3	69.42.41,00	B.
	\odot S.L.....	4.43,6	44,5	36,0	39,0	43,2	39,9		+1	54.19.40,79				70.14. 9,87	B.
July 23	(c) \odot N.L.....	4.64,2	62,0	56,3	61,0	59,5	60,9	12,572	-2	92.49.15,85	29,940	68,9	71,4	108.45.50,13	B.
	\odot N.L.....	...	...	...	...	...	...	12,443	-1	92.49.16,47				108.45.50,75	B.
	\odot N.L.....	...	...	...	...	...	...	12,351		92.49.16,04				108.45.50,32	B.
	\odot N.L.....	...	...	...	...	...	...	12,311	+1	92.49.14,58				108.45.48,86	B.
	\odot N.L.....	...	...	...	...	...	...	12,159	+2	92.49.15,28				108.45.49,56	B.
	(d) η Serpentis R....	4.24,2	20,9	17,1	18,7	20,0	21,5	5,870		146.45.50,83	29,942	65,7	61,8	92.55.53,19	B.
	η Serpentis.....	0.44,0	38,9	36,1	37,7	39,1	38,0		+1 $\frac{1}{4}$	77. 0.38,94				92.55.54,64	B.
	δ Ursæ Minoris R.	1.24,8	19,0	15,1	18,0	19,3	20,6	12,298		236.15.36,02				3.24. 7,45	B.
	δ Ursæ Minoris...	0.59,6	52,5	51,2	52,3	53,4	54,0			347.30.53,90				3.24. 9,05	B.
	α Lyrae R.....	3.47,1	42,0	39,6	41,1	43,1	43,2	8,333		188.19.21,81	29,940	65,2	62,0	51.21.14,38	B.
	α Lyrae.....	2.11,2	5,8	3,7	3,0	4,9	6,0		+1 $\frac{1}{2}$	35.27. 5,97				51.21.13,84	B.
	α Draconis R....	2.47,7	42,5	39,1	41,1	42,8	42,1	10,924		208.52.27,71				30.47.47,75	B.
	α Draconis.....	4. 7,9	1,1	0,7	0,4	2,0	3,1			14.54. 2,42				30.47.49,56	B.
	(e) ϵ Bootis R.....	4.34,6	30,1	27,0	28,3	29,4	32,0	9,010		177.24.55,24	29,936	69,2	72,4	62.15.52,60	B.
	ϵ Bootis.....	1.36,2	32,2	27,9	30,3	32,9	32,7			46.21.31,98				62.15.51,50	B.
	\odot N.L.....	0.33,0	30,1	24,8	29,0	30,9	29,1	11,954	-2	95.39.55,86	29,944	69,5	69,0	111.37. 0,39	B.
	\odot N.L.....	...	...	...	...	...	...	11,923	-1	95.39.55,34				111.36.59,87	B.
	\odot N.L.....	...	...	...	...	...	...	11,895		95.39.54,48				111.36.59,01	B.
	\odot N.L.....	...	...	...	...	...	...	11,829	+1	95.39.54,48				111.36.59,62	B.
	\odot N.L.....	...	...	...	...	...	...	11,723	+2	95.39.55,09				111.36.59,62	B.
July 24	β Scorpii.....	0.54,9	48,9	46,2	48,9	50,9	48,4		+ $\frac{3}{4}$	93.25.49,64	29,948	69,4	68,3	109.22.30,55	B.
	Antares R.....	0.39,4	34,9	31,3	34,1	36,0	34,3	12,447		123.39.48,48		69,0	66,6	116. 4.57,62	B.
	Antares.....	1.44,4	38,0	35,6	37,8	40,1	37,4		+3	100. 6.38,17				116. 4.55,95	B.
	ζ Herculis R.....	3.18,3	13,0	11,1	13,3	14,1	15,5	7,421		181.34.12,37				58. 6.30,98	B.
	ζ Herculis.....	2.20,9	14,0	12,7	12,2	15,2	15,7			42.12.15,05				58. 6.30,08	B.
	Σ 341.....	3.68,4	61,0	59,1	60,4	63,1	62,6		+ $\frac{1}{2}$	52.39. 2,34	29,952	67,7	63,7	68.33.30,26	B.
	δ Ursæ Minoris R.	1.29,0	20,8	20,0	19,7	23,0	23,2	12,464		236.15.35,71	29,962	67,0	63,2	3.24. 7,84	B.
	δ Ursæ Minoris...	0.60,7	53,1	52,6	52,0	54,2	54,8			347.30.54,51				3.24. 9,74	B.
	α Lyrae R.....	3.27,8	20,6	19,5	19,9	22,2	23,1	7,339		188.19.22,04				51.21.14,12	B.
	α Lyrae.....	2.11,3	5,1	3,0	3,2	5,1	5,8			35.27. 5,52				51.21.13,36	B.
	(f) \odot N.L.....	3.32,1	32,1	24,2	28,1	30,0	28,9	9,919		54.13.34,99	29,940	72,7	80,5	70. 8. 3,88	B.
	\odot S.L.....	4.62,0	61,8	54,2	59,0	60,7	57,2	9,919	+1	54.45. 5,11				70.39.34,71	B.
July 25	(g) \odot S.L.....	4.27,1	22,7	19,2	20,0	22,0	22,2	13,240		54.58.18,68	29,948	70,1	72,7	70.52.49,14	B.
July 26	(h) \odot N.L.....	0.27,2	22,1	19,4	20,6	21,2	21,5	10,410		54.40.17,80	30,150	68,7	70,0	70.34.48,28	B.
	\odot S.L.....	1.54,0	49,0	45,9	47,1	48,3	47,8		+2	55.11.48,39				71. 6.19,60	B.
	52 Herculis R....	1.40,1	33,0	31,0	33,0	33,1	33,3	11,400		195.56. 8,97	30,184	67,7	64,0	43.44.19,43	B.
	52 Herculis.....	0.24,9	17,9	16,6	16,2	18,2	19,0			27.50.18,77				43.44.18,85	B.
	(k) μ^1 Sagittarii R. ...	4.27,4	18,5	19,2	18,0	18,2	20,3	89,805	+ $\frac{1}{2}$	128.37.56,85	30,182	66,0	60,2	111. 5.34,64	B.
	μ^1 Sagittarii.....	3.36,0	27,0	25,9	26,3	26,6	28,0		+3	95. 8.27,46				111. 5.30,63	B.
	λ Sagittarii.....	1.57,8	48,9	49,2	49,7	49,2	49,2			99.31.50,50				115.30. 1,41	B.
	(l) α Lyrae R.....	3.30,1	21,9	22,0	21,6	22,2	24,0	7,387		188.19.22,16	30,180	65,8	60,4	51.21.14,18	B.
	α Lyrae.....	2.12,0	4,2	3,4	3,0	4,0	5,1			35.27. 5,08				51.21.13,10	B.
	(m) \odot S.L.....	0.12,9	5,1	5,0	6,1	5,9	5,1	8,558	-2	95.35.36,75	30,184	65,2	60,2	111.32.45,36	B.
	\odot S.L.....	...	...	...	...	...	...	8,685	-1	95.35.36,42				111.32.45,03	B.
	\odot S.L.....	...	...	...	...	...	...	8,760		95.35.36,89				111.32.45,50	B.
July 27	\odot S.L.....	...	...	...	...	...	...	8,907	+1	95.35.35,92				111.32.44,53	B.
	\odot S.L.....	...	...	...	...	...	...	8,990	+2	95.35.36,09				111.32.44,70	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',200, 10',212, 10',216, 10',228, 10',236 at the five wires.
 From July 25 = 10',194, 10',206, 10',210, 10',222, 10',230. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = -0'',9.
 From July 25 = -2'',7. ZENITH POINT = 21°.53'.14'',16. ASSUMED CO-LATITUDE = 37°.47'.8'',28.

(a) Times by M, 18^h.22^m.40^s and 18^h.24^m.0^s. M fast on H, 19^s.6. (b) Great motion. (c) The microscope readings have been increased 1'.
 (d) Indefinite. (e) Unsteady. Times by M, 18^h.21^m.50^s and 18^h.23^m.8^s. M fast on H, 20^s. (f) Times by M, 18^h.21^m.46^s and 18^h.22^m.38^s.
 M fast on H, 19^s. (g) Great motion. The microscope readings for S.L. have been diminished 1', and no correction has been applied for Runs. It is presumed that S.L. was taken on the micrometer wire. (h) Without the dark glass: N.L. was clouded. (i) Clouds passing. (k) Faint from clouds. (l) Indistinct. (m) Very badly defined.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"	r.		"	Inch.	°	°	"	
July 27	(a) Σ 2484.....	2.15,7	6,9	6,1	6,1	7,7	8,5			55.17.8,32	30,184	64,9	59,8	71.11.40,46	B.
	ρ^1 Sagittarii.....	1.28,9	19,9	18,2	19,1	20,0	20,0			92.11.20,90				108.7.54,64	B.
	(b) Σ 2533.....	0.28,6	20,9	21,0	20,2	21,7	21,1			74.50.22,22				90.45.32,61	B.
	(c) Σ 375.....	2.50,0	41,1	41,2	40,8	43,0	42,2		+3	56.17.43,23				72.12.16,85	B.
	e^2 Sagittarii.....	2.34,9	26,1	25,9	24,8	26,9	26,9			90.32.27,37		65,9	59,4	106.28.48,05	B.
July 28	Venus S.L.....	2.32,1	26,0	24,1	24,0	25,4	26,7		+1 $\frac{1}{2}$	60.7.26,96	29,914	65,6	65,3	76.2.5,61	B.
	(c) Venus N.L.....	...	...	...	...	...	...	12,890	+1 $\frac{1}{2}$	60.6.31,91				76.1.10,56	B.
July 29	Arcturus R.....	0.24,1	17,9	17,6	18,0	18,1	18,1	9,001		169.40.44,13	29,898	66,2	65,1	70.0.13,92	B.
	Arcturus.....	0.49,8	44,2	40,9	42,0	43,0	42,9			54.5.43,73				70.0.13,46	B.
	β Coronæ Bor. R..	4.25,2	19,7	19,0	20,0	18,1	20,8	9,310		179.19.38,83	29,896	65,0	63,0	60.21.7,20	B.
	β Coronæ Borealis.	1.55,2	49,8	47,5	47,1	48,0	48,5			44.26.49,18				60.21.6,89	B.
	(d) η Draconis R....	2.31,0	22,9	22,0	21,8	22,3	23,0	9,758	+2 $\frac{1}{2}$	211.32.31,79		63,1	59,8	28.7.40,93	B.
	η Draconis.....	3.60,3	51,9	52,9	51,9	53,0	54,1		+3	12.13.56,20				28.7.40,60	B.
	52 Herculis R....	1.14,9	6,2	7,8	5,9	6,0	6,1	10,108		195.56.9,84		62,9	58,6	43.44.18,57	B.
	52 Herculis.....	0.25,2	17,6	17,0	17,2	17,0	18,1			27.50.18,65				43.44.18,74	B.
	Σ 2166. sf.....	3.46,2	38,0	37,9	36,8	36,6	40,1			62.33.38,93		62,0	58,5	78.28.22,24	B.
	Σ 333.....	4.41,9	33,2	34,1	32,7	32,0	34,9			63.24.34,38				79.19.19,18	B.
	Piazzi XVII. 260.	3.15,1	5,1	6,5	4,7	4,3	7,0			66.48.6,83	29,898	61,6		82.42.58,01	B.
	τ Ophiuchi.....	4.56,8	46,1	48,6	46,0	44,9	47,3		+1 $\frac{1}{2}$	82.14.47,80				98.10.22,24	B.
	α^2 Capricorni R...	2.25,8	15,9	17,0	15,0	14,9	18,9	12,892		136.41.21,83	29,892	58,6	53,4	103.1.5,16	B.
	(e) α^2 Capricorni.....	0.15,9	6,5	9,1	7,0	5,2	7,9		+1	87.5.8,54				103.1.7,21	B.
	(f) ϵ Aquarii.....	2.48,6	39,1	40,9	39,0	39,8	40,7		+1 $\frac{1}{2}$	84.7.41,06	29,894	57,8	50,9	100.3.25,24	B.
	) N.L.....	1.70,0	59,6	62,4	59,2	58,8	60,1	13,931	-2	87.35.36,94	29,890		51,5	103.31.39,03	B.
	) N.L.....	...	...	...	...	...	...	14,083	-1	87.35.37,40				103.31.39,49	B.
	) N.L.....	...	...	...	...	...	...	14,280		87.35.36,69				103.31.38,78	B.
	) N.L.....	...	...	...	...	...	...	14,534	+1	87.35.34,88				103.31.36,97	B.
	) N.L.....	...	...	...	...	...	...	14,749	+2	87.35.33,73				103.31.35,82	B.
	(f) β Aquarii.....	4.31,8	21,9	25,1	21,7	21,7	25,2		+2	80.19.24,10	29,882	56,7	49,8	96.14.52,80	B.
July 30	Venus N.L.....	4.21,7	15,4	14,5	14,1	14,9	17,9			60.4.16,03	29,534	63,5	63,7	75.58.54,17	B.
	Venus S.L.....	...	...	...	...	...	...	7,699		60.5.8,53				75.59.46,67	B.
July 31	δ Herculis. np....	3.52,9	47,1	45,9	45,0	46,8	48,0			49.3.47,27	29,624	61,6	55,7	64.58.10,69	B.
	Σ 2166. sf.....	3.43,4	38,2	35,8	35,9	37,0	38,8			62.33.37,85				78.28.20,99	B.
Aug. 1	(c) Venus N.L.....	0.37,5	32,4	29,9	31,4	31,9	32,9			60.0.32,63	29,814	60,3	63,0	75.55.10,68	B.
	Venus S.L.....	...	...	...	...	...	...	7,600		60.1.27,19				75.56.5,26	B.
Aug. 2	\odot S.L.....	0.30,1	26,2	23,9	25,0	25,3	25,3	13,132		55.39.25,23	29,812	61,8	64,7	71.33.56,59	B.
	\odot N.L.....	2.53,9	48,9	47,1	47,7	48,2	49,0			55.7.48,98				71.2.19,59	B.
	Venus S.L.....	4.11,9	5,2	4,9	5,0	5,8	6,5			59.59.6,33	29,384	62,7	62,8	75.53.43,72	B.
	(g) Venus N.L.....	...	...	...	...	...	...	12,541		59.58.17,92				75.52.55,29	B.
Aug. 4	Venus S.L.....	3.43,9	38,9	36,6	37,1	38,6	39,1			59.53.38,83	29,830	68,6	68,0	75.48.16,28	B.
	Venus N.L.....	...	...	...	...	...	...	12,769		59.52.45,67				75.47.23,10	B.
Aug. 5	(h) \odot N.L.....	1.25,7	22,1	18,7	19,2	21,3	21,4	12,466		56.55.34,48	29,808	64,8	69,5	72.50.7,29	B.
	\odot S.L.....	2.13,4	10,0	6,1	8,0	9,1	9,5		+1	57.27.9,07				73.21.42,65	B.
Aug. 6	(i)) N.L.....	1.22,7	17,2	15,7	16,0	16,7	18,9	9,552	+1	53.31.33,28	29,552	57,9	56,0	69.26.1,98	B.
	) N.L.....	...	...	...	...	...	...	9,647	+2	53.31.32,95				69.26.1,65	B.
	Capella R.....	0.34,0	28,1	26,8	27,9	27,6	28,9	10,721	-1	195.30.18,14	29,562	58,9	59,2	44.10.11,11	B.
	Capella.....	1.17,1	10,1	10,3	9,2	9,9	11,2			28.16.11,23				44.10.11,20	B.
	(c) Venus S.L.....	2.19,2	15,2	12,0	13,1	14,9	15,1		+1	59.47.14,88	29,588	62,5	63,1	75.41.52,23	B.
	Venus N.L.....	...	...	...	...	...	...	12,659	+1	59.46.24,25				75.41.1,58	B.
Aug. 7	(k) Mercury, centre...	1.40,1	37,6	32,2	35,1	36,0	35,6	12,659	+4 $\frac{1}{2}$	62.0.44,35	29,596	63,6	64,7	77.55.25,17	B.
	(l) B.A.C. 6603.....	2.58,1	51,9	52,8	50,9	51,9	53,6	10,290		24.17.51,55	29,592	58,3	50,7	40.11.47,62	B.
	Σ 2533.....	0.25,2	18,2	19,1	17,7	18,6	21,1		+1 $\frac{1}{2}$	74.50.19,97				90.45.29,78	B.

MICROMETER READING FOR COINCIDENCE with fixed Wire = 10',194, 10',206, 10',210, 10',222, 10',230 at the five wires. From July 30 = 10',202, 10',214, 10',218, 10',230, 10',238. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = -2'',7. From Aug. 1 = -1'',6. ZENITH POINT = 21°.53'.14'',16. From Aug. 1 = 21°.53'.14'',64. ASSUMED Co-LATITUDE 37°.47'.8'',28.

(a) Not seen double: quite alone. (b) No other in the field. (c) Cloudy. (d) Hurried. (e) Very unsteady. (f) Too much wind for reflexion observations. (g) Faint from clouds. (h) Great motion. (i) Very uneven. (k) Unintentionally on the micrometer wire as left in the previous observation. (l) Too near the fixed wire. The faint companion was not seen.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.			Observer.
		A	B	C	D	E	F					Int.	Ext.				
		"	"	"	"	"	"					"	"	"	"	"	
Aug. 7	θ Cygni R.	1. 47,7	43,3	42,8	42,3	43,2	44,7	8,040		199. 32. 29,31	29,590	51,2	50,2	40. 7. 55,97		B.	
	θ Cygni.	3. 64,9	57,2	59,4	55,9	57,0	60,1			24. 13. 58,87				40. 7. 54,87		B.	
	(a) Σ 2596.	1. 45,3	36,2	37,8	35,9	38,0	40,0			59. 11. 38,78	29,588	56,6	50,5	75. 6. 16,30		B.	
	(b) Σ 2607.	4. 68,0	59,7	61,4	59,9	60,1	63,4			32. 15. 2,08				48. 9. 6,26		B.	
	32 Cygni R.	4. 22,8	16,9	16,9	16,0	16,1	19,4	7,999		196. 55. 4,03		55,9	50,7	42. 45. 23,90		B.	
	32 Cygni.	1. 32,1	23,9	24,4	22,8	23,1	27,2			26. 51. 25,52				42. 45. 24,17		B.	
	(c) \rangle N.L.	3. 26,3	20,0	20,0	18,8	19,0	21,3	12,005	-1	52. 12. 42,89	29,532	57,9	57,0	68. 7. 9,72		B.	
	\rangle N.L. ....	...	...	...	...	...	...	12,072		52. 12. 42,09				68. 7. 8,92		B.
	\rangle N.L. ....	...	...	...	...	...	...	12,151	+1	52. 12. 41,31				68. 7. 8,14		B.
	\rangle N.L. ....	...	...	...	...	...	...	12,161	+2	52. 12. 42,01				68. 7. 8,84		B.
Capella R.	0. 26,0	21,1	20,0	21,0	19,9	22,0	10,360		195. 30. 18,70	29,536	57,8	58,6	44. 10. 10,55		B.		
Capella.	1. 16,8	9,5	10,7	8,6	8,1	10,7		+1	28. 16. 10,83				44. 10. 10,80		B.		
Aug. 8	\odot S.L.	3. 40,9	37,0	34,0	34,6	36,0	37,1	13,736		58. 17. 23,03	29,562	62,6	64,7	74. 11. 57,90		B.	
	\odot N.L.	0. 51,1	48,0	45,1	46,2	47,0	46,9		+1	57. 45. 47,16				73. 40. 21,25		B.	
Aug. 10	(d) δ Ursæ Minoris R.	1. 44,8	39,6	37,6	36,9	39,4	40,6	12,882		236. 15. 40,88				3. 24. 3,78		B.	
	δ Ursæ Minoris.	0. 49,9	44,1	44,0	43,1	44,1	46,1			347. 30. 50,53				3. 24. 5,91		B.	
	Σ 2525.	4. 50,0	40,8	42,9	39,9	41,4	45,7			47. 4. 42,95	29,656	56,0	50,2	62. 59. 3,77		B.	
	Σ 2556.	1. 10,5	3,1	3,2	1,8	4,5	4,7		$+\frac{3}{4}$	52. 11. 4,55				68. 5. 31,95		B.	
	57 Sagittarii.	4. 15,2	8,1	9,4	6,9	7,0	9,0		$+1\frac{1}{4}$	93. 29. 8,74	29,664	55,8	49,6	109. 25. 54,52		B.	
	ρ Draconis R.	1. 27,1	23,0	20,2	19,8	22,1	21,8	10,740		217. 6. 11,24		55,6	49,4	22. 33. 55,93		B.	
	ρ Draconis.	0. 23,5	16,1	16,6	16,4	17,2	19,4			6. 40. 18,17				22. 33. 56,06		B.	
	(e) 32 Cygni R.	4. 25,1	19,6	18,8	18,9	19,0	21,5	8,142	+1	196. 55. 3,30				42. 45. 24,66		B.	
	32 Cygni.	1. 30,1	22,1	22,0	21,9	22,0	24,9		$+2\frac{1}{2}$	26. 51. 24,69				42. 45. 23,37		B.	
	Σ 2556.	1. 9,1	3,1	3,1	2,0	4,2	4,0			52. 11. 4,13	29,556	59,1	56,0	68. 5. 31,02		B.	
Aug. 13	(e) α Ophiuchi R.	1. 24,0	21,1	19,0	19,8	21,9	20,9	8,260	$+1\frac{1}{4}$	162. 22. 1,96	29,498	60,4	56,8	77. 19. 7,72		B.	
	α Ophiuchi.	4. 31,2	27,0	25,0	24,1	27,7	28,4		+3	61. 24. 27,07				77. 19. 7,47		B.	
	α Lyrae R.	3. 24,1	19,1	19,9	16,1	21,2	21,0	7,064		188. 19. 25,53	29,492	58,8	55,5	51. 21. 11,11		B.	
	(f) α Lyrae.	1. 66,1	60,6	59,6	59,0	60,8	62,8		+1	35. 27. 1,39				51. 21. 8,75		B.	
	(g) \circ Draconis R.	2. 19,4	15,8	13,6	13,0	14,9	15,8	9,271		208. 52. 34,84	29,488	58,7	55,1	30. 47. 41,10		B.	
	\circ Draconis.	3. 59,8	53,7	53,9	53,4	54,2	57,0		+1	14. 53. 55,15				30. 47. 41,81		B.	
Aug. 17	(h) Σ 2415.	4. 53,3	49,2	46,7	47,8	49,0	50,5			53. 39. 49,17	29,850	58,3	54,3	69. 34. 18,54		B.	
	(i) 17 Lyrae.	4. 55,1	49,8	49,0	48,1	48,2	51,7			41. 49. 50,07				57. 44. 4,64		B.	
	(k) Σ 2499.	0. 12,1	6,1	5,3	5,1	5,1	7,0			52. 25. 6,78	29,856	57,9	53,4	68. 19. 34,51		B.	
	Σ 2525.	4. 48,7	41,2	41,2	39,3	41,0	43,9			47. 4. 42,30				62. 59. 3,13		B.	
	Σ 2556.	1. 8,9	1,0	0,9	0,2	2,0	1,9			52. 11. 2,43	29,858	57,0	52,9	68. 5. 29,87		B.	
	(l) ω^s Cygni R.	0. 33,9	27,9	26,1	27,1	27,2	29,6	6,953	-1	198. 6. 35,92	29,868	56,8	52,5	41. 33. 50,82		B.	
	ω^s Cygni.	4. 57,2	52,1	50,8	49,9	50,9	53,8			25. 39. 52,20				41. 33. 49,66		B.	
	α Cygni R.	4. 22,1	17,1	16,9	15,9	15,5	19,3	9,904		194. 24. 24,05				45. 16. 6,48		B.	
	α Cygni.	2. 9,7	3,2	4,0	2,8	3,0	5,0			29. 22. 4,50				45. 16. 5,75		B.	
	(e) 61' Cygni R.	4. 25,0	19,9	18,9	19,4	19,3	22,9	7,849		187. 40. 10,06	29,874	55,9		52. 0. 27,54		B.	
	61' Cygni.	1. 22,8	16,0	15,5	15,5	15,2	19,1		$+1\frac{3}{4}$	36. 6. 17,64				52. 0. 25,96		B.	
Aug. 18	Venus S.L.	0. 33,1	27,9	25,1	26,0	27,6	28,7			59. 0. 28,05	30,058	57,8	58,6	74. 55. 5,25		B.	
	Venus N.L. ....	...	...	...	...	...	...	12,419		58. 59. 42,20				74. 54. 19,38		B.
Aug. 19	(m) \odot N.L.	4. 27,1	24,1	21,9	20,8	22,9	23,9	12,025	$+1\frac{1}{2}$	61. 8. 45,65	30,042	67,0	64,4	77. 3. 25,76		B.	
	\odot S.L.	0. 30,0	26,1	23,1	23,6	25,0	25,1		+3	61. 40. 25,07				77. 35. 5,92		B.	
	Mercury, centre.	0. 16,1	13,1	11,2	12,1	13,1	12,1			70. 30. 12,93	30,040	63,7	66,0	86. 25. 10,84		B.	
Aug. 20	(n) Mercury, centre.	1. 22,8	20,1	16,0	17,8	19,5	19,0			71. 11. 19,13	29,758	63,3	69,1	87. 6. 17,59		B.	
	δ Ursæ Minoris R.	1. 26,9	19,6	17,8	18,0	20,2	23,7	12,066		236. 15. 42,44	29,746	57,4	53,6	3. 24. 1,12		B.	
	(o) δ Ursæ Minoris.	0. 53,0	45,9	46,0	44,0	47,2	48,1			347. 30. 47,59				3. 24. 1,87		B.	
	β Lyrae R.	1. 28,5	22,1	21,0	21,2	23,1	24,2	7,972		182. 52. 10,11	29,740	58,0	53,8	56. 48. 32,64		B.	
	β Lyrae.	4. 23,7	14,9	16,0	15,8	16,1	18,2		$+1\frac{1}{2}$	40. 54. 17,44				56. 48. 30,91		B.	
	Σ 2504.	3. 57,1	51,0	49,9	48,1	51,0	52,9			55. 13. 51,47	29,736	57,6	54,0	71. 8. 22,93		B.	
	θ Cygni R.	1. 25,1	19,2	18,5	18,1	20,0	20,8	6,581		199. 32. 36,03	29,732	57,3	53,1	40. 7. 49,25		B.	
	θ Cygni.	3. 60,6	53,4	55,7	52,0	54,1	55,3			24. 13. 54,98				40. 7. 50,98		B.	

MICROMETER READING for COINCIDENCE with fixed Wire = 10', 202, 10', 214, 10', 218, 10', 230, 10', 238 at the five wires. From Aug. 8 = 10', 199, 10', 211, 10', 215, 10', 227, 10', 235. From Aug. 17 = 10', 203, 10', 215, 10', 219, 10', 231, 10', 239. ONE REVOLUTION = 20', 838. CORRECTION for RUNS = -1", 6. From Aug. 10 = -3", 2. From Aug. 17 = -1", 6. ZENITH POINT = 21°. 53'. 14", 64. ASSUMED CO-LATITUDE = 37°. 47'. 8", 28.

(a) Not seen to be double. (b) No correction for Runs. (c) Very ragged limb. The observer was not certain that the Circle was clamped. (d) Extremely unsteady. Times by M, 18^h. 27^m. 13^s and 18^h. 28^m. 34^s. M fast on H, 12^s. 8. (e) Indistinct. (f) Cloudy. (g) Very faint from clouds. (h) No other near. The minutes of the microscope Readings were carefully noted. (i) Observed as single. (k) No other in the field. (l) Faint. (m) Taken hurriedly: great waving. (n) Clouds passing. (o) At times by M, 18^h. 23^m. 13^s and 18^h. 24^m. 6^s. M fast on H, 16^s.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	o	o	o	
Aug. 20	(a) <i>b</i> Sagittarii.....	0. 30,2	24,2	24,6	22,5	26,0	24,8	7,721		101. 35. 25,37	29,726	57,2	52,9	117. 34. 25,56	B.
	(b) Σ 2626.....	3. 66,1	59,8	60,3	57,9	59,5	61,9			43. 59. 0,70				59. 53. 17,73	
	32 Cygni R.....	4. 19,4	14,9	14,8	13,9	15,8	15,4			196. 55. 7,55				42. 45. 20,38	
	32 Cygni.....	1. 27,5	19,9	18,7	18,9	20,0	21,9			26. 51. 21,08				42. 45. 19,73	
Aug. 24	⊙ S.L.....	1. 47,7	44,0	42,9	42,1	44,0	44,0	11,816		63. 21. 10,66	29,650	59,9	65,7	79. 15. 53,75	B.
	⊙ N.L.....	4. 33,1	29,9	27,4	26,6	28,9	30,9			62. 49. 29,10				78. 44. 11,28	
Aug. 26	⊙ S.L.....	3. 37,1	33,0	31,1	30,8	32,4	33,9	12,760		64. 2. 39,78	29,972	59,8	61,4	79. 57. 25,08	B.
	(c) ⊙ N.L.....	0. 61,8	58,1	56,2	56,2	57,8	56,9			63. 30. 57,53				79. 25. 41,88	
	(d) ⊙ N.L.....	0. 11,9	8,2	6,1	6,8	7,1	7,1			84. 54. 17,40				100. 50. 4,66	
	⊙ N.L.....	...	...	...	...	...	...			84. 54. 21,51				100. 50. 8,77
	⊙ N.L.....	...	...	...	...	...	...			84. 54. 20,33				100. 50. 7,59
	⊙ N.L.....	...	...	...	...	...	...			84. 54. 19,35				100. 50. 6,61
	Venus S.L.....	0. 13,7	8,0	6,1	6,5	9,0	8,9			53. 35. 9,70		30,032	56,4	74. 29. 46,39	
	Venus N.L.....	...	...	...	...	...	...			58. 34. 27,96				74. 29. 4,63
	⊙ N.L.....	3. 36,9	33,1	32,7	29,9	33,4	32,6			63. 52. 0,24	30,030	59,2	60,1	79. 46. 45,45	B.
	⊙ S.L.....	3. 45,2	41,7	40,1	39,0	41,5	41,4			64. 23. 41,17				80. 18. 27,34	
Aug. 27	(f) 61 ¹ Cygni R.....	4. 17,0	11,7	11,9	9,8	13,3	13,1	7,222	+1 3/4	187. 40. 14,89	30,050	55,0	50,2	52. 0. 22,87	B.
	61 ¹ Cygni.....	1. 17,9	13,2	12,1	12,0	14,3	14,8			36. 6. 14,31				52. 0. 22,79	
	α Cephei R.....	1. 11,9	6,1	5,1	3,1	8,3	4,9			211. 36. 12,29				28. 4. 0,60	
	α Cephei.....	0. 22,1	16,9	16,0	15,1	18,4	16,9			12. 10. 17,53				28. 4. 1,14	
	ξ Aquarii.....	1. 64,1	58,6	58,1	56,7	59,0	58,8			82. 36. 59,05				98. 32. 36,80	
	(g) λ Capricorni.....	3. 42,0	36,0	36,9	34,8	37,1	36,3			86. 8. 36,88	30,058	54,9		102. 4. 31,38	
	μ Capricorni.....	0. 32,1	25,1	24,9	24,9	25,9	26,5			88. 20. 26,53				104. 16. 33,75	
	30 Aquarii.....	0. 30,1	25,0	24,1	23,8	25,0	26,1			81. 20. 25,65	30,056	50,0		97. 15. 58,21	
	(h) Σ 2878.....	2. 28,5	21,9	20,2	19,9	21,2	22,6			66. 52. 22,26				82. 47. 14,38	
	⊙ N.L.....	4. 20,9	13,9	15,1	13,0	14,4	16,1			79. 53. 31,99		54,5	49,3	95. 48. 59,28	
	(i) ⊙ N.L.....	...	...	...	...	...	...			79. 53. 33,27				95. 49. 0,56
	(k) ⊙ S.L.....	0. 42,3	36,6	35,2	34,9	36,9	36,9			80. 25. 3,91				96. 20. 33,13	
	⊙ S.L.....	...	...	...	...	...	...			80. 25. 2,66				96. 20. 31,88
	(l) η Aquarii.....	0. 19,1	13,5	12,1	11,0	12,1	13,6			74. 59. 32,14		53,9	48,4	90. 54. 43,79	
	(l) τ^1 Aquarii.....	1. 44,1	37,0	37,0	36,3	36,1	37,5			88. 55. 56,46				104. 52. 8,00	
	8 Andromedæ R.....	4. 23,9	19,9	16,8	16,9	18,9	19,9			197. 50. 39,24		53,4		41. 49. 47,84	
	8 Andromedæ.....	0. 54,9	50,0	47,5	47,0	48,9	50,0			25. 55. 49,65				41. 49. 47,45	
	Venus N.L.....	2. 24,2	19,9	18,1	16,9	19,0	20,2			58. 32. 19,52	30,100	55,9	55,2	74. 26. 56,34	
	Venus S.L.....	...	...	...	...	...	...			58. 32. 59,91				74. 27. 36,75
Aug. 28	(m) ⊙ N.L.....	2. 29,5	26,1	24,6	23,1	25,1	25,0	8,280	+4 1/2	64. 13. 5,99	30,102	60,6	61,4	80. 7. 51,83	B.
	61 ¹ Cygni R.....	4. 28,3	24,1	22,1	22,1	24,0	25,3			187. 40. 13,30				52. 0. 24,48	
	61 ¹ Cygni.....	1. 19,9	15,2	12,3	12,8	14,1	15,8			36. 6. 14,92				52. 0. 23,42	
	α Cephei R.....	1. 23,1	17,9	15,5	14,8	18,1	17,1			211. 36. 11,85		30,096	56,5	28. 4. 1,02	
	α Cephei.....	0. 23,2	18,4	17,2	16,1	18,5	18,7			12. 10. 18,65				28. 4. 2,24	
	ξ Aquarii.....	1. 64,1	59,1	57,8	57,1	58,1	58,1			82. 36. 58,88		56,2	49,9	98. 32. 36,83	
	π^2 Cygni R.....	0. 33,5	29,1	25,1	27,1	28,1	28,0			198. 16. 15,04				41. 24. 11,59	
	π^2 Cygni.....	0. 18,9	12,6	11,1	10,8	12,1	12,7			25. 30. 13,02				41. 24. 10,37	
	Σ 2848. <i>sp.</i>	2. 42,7	37,0	35,0	34,9	36,9	38,9			68. 52. 37,35				84. 47. 33,82	
	ι Aquarii R.....	3. 57,9	52,8	52,8	50,4	53,8	53,7			135. 5. 38,20		56,0	49,4	104. 37. 0,86	
	ι Aquarii.....	0. 55,8	49,1	48,7	47,6	49,1	49,1			88. 40. 49,83				104. 36. 59,61	
	η Aquarii.....	4. 36,6	31,1	30,0	28,0	30,3	32,9			74. 59. 31,10		55,6	48,5	90. 54. 42,98	
	⊙ N.L.....	2. 39,5	34,6	32,9	33,9	33,1	36,4			74. 43. 13,01				90. 38. 24,10	
	⊙ N.L.....	...	...	...	...	...	...			74. 43. 13,68		55,0	48,7	90. 38. 24,77
	⊙ N.L.....	...	...	...	...	...	...			74. 43. 14,20				90. 38. 25,29
	⊙ N.L.....	...	...	...	...	...	...			74. 43. 13,09				90. 38. 24,18
	⊙ N.L.....	...	...	...	...	...	...			74. 43. 12,99				90. 38. 24,08
	κ Piscium.....	0. 19,9	14,9	13,5	11,8	13,6	14,9			73. 40. 14,75		44,9	48,3	89. 35. 22,97	
	(n) ι Piscium R.....	2. 41,2	35,1	35,1	32,9	37,1	38,1			154. 28. 45,78				85. 12. 41,11	
	ι Piscium.....	2. 48,0	43,0	40,8	40,2	42,1	43,4			69. 17. 42,68				85. 12. 40,29	
	Venus S.L.....	1. 10,9	6,9	5,0	4,8	6,1	6,1			58. 31. 6,53	30,108	57,8	61,5	74. 25. 42,79	
	Venus N.L.....	...	...	...	...	...	...			58. 30. 26,92				74. 25. 3,16

MICROMETER READING for COINCIDENCE with Fixed Wire = 10',203, 10',215, 10',219, 10',231, 10',239 at the five wires.
 From Aug. 24 = 10',198, 10',211, 10',218, 10',227, 10',235. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = -1'',6.
 From Aug. 24 = -2'',5. ZENITH POINT = 21°. 53'. 14'',64. ASSUMED CO-LATITUDE = 37°. 47'. 8'',28.

(a) Very unsteady. (b) The first of four. (c) Without the dark glass: clouds passing and great motion. (d) The observation is worth little, on account of clouds. (e) Without the dark glass. (f) Faint from clouds. (g) Faint. (h) Only one star seen, and that very faintly: the night was cloudy. (i) This bisection was not good. (k) The S.L. was scarcely full. (l) Supposed to have been taken on the micrometer wire as left in the observation of the Moon. (m) Great motion. The micrometer reading is supplied conjecturally from the previous observation. (n) Indefinite and unsteady.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Aug. 29	(a) N.L.	0.28,1	26,1	22,1	24,6	26,0	25,0	13,027	+1	64.34.26,98	30,122	62,4	67,0	80.29.12,92	B.
	⊙ S.L.	1.14,9	12,9	8,2	10,7	12,0	11,1			65.6.11,41				81.0.58,32	B.
	Polaris SP. R.	1.19,0	13,0	11,1	11,2	12,9	14,0	11,299		241.10.51,45	30,100	63,0	69,0	-1.31.14,72	B.
	(b) Polaris SP.	0.41,9	37,1	37,2	36,1	40,9	36,1		12,022	342.35.37,73				-1.31.14,82	B.
	δ Ursæ Minoris R.	1.25,6	22,2	17,9	18,9	21,1	22,2			236.15.43,91	30,106	61,2	58,1	3.23.59,53	B.
	δ Ursæ Minoris.	0.49,8	46,8	44,1	43,9	46,0	45,8			347.30.46,13				3.24.0,29	B.
	Σ 2499.	0.10,1	6,1	2,8	3,7	6,0	4,7		5,589	52.25.5,57		60,5	55,9	68.19.33,40	B.
	β Aquilæ R.	1.29,1	25,6	22,3	23,9	25,1	25,9			155.43.1,97	30,112	59,7	54,4	83.58.21,48	B.
	β Aquilæ.	3.30,5	26,8	24,6	23,0	27,1	28,0			68.3.26,62				83.58.20,79	B.
	Σ 2611. sp.	4.13,7	7,6	6,2	6,1	9,0	9,2		+3	27.9.10,02				43.3.9,02	B.
	Σ 2643.	1.55,6	51,0	49,1	49,2	52,1	50,6			77.31.51,23	30,114	59,4	53,7	93.27.9,89	B.
	* R. 20 ^h . 11 ^m . 53 ^s .	0.61,0	56,6	54,0	54,8	58,6	57,8			60.10.57,16				76.5.36,78	B.
	η Cephei R.	4.24,0	19,1	17,8	16,8	21,8	20,9	9,093	+1	210.54.43,65				28.45.30,01	B.
	η Cephei.	1.49,3	43,6	43,1	43,2	45,4	45,1			12.51.44,92				28.45.29,30	B.
	61 ¹ Cygni R.	4.24,9	20,0	18,7	18,8	21,3	22,8	7,660		187.40.14,54		58,0	52,6	52.0.23,17	B.
	61 ¹ Cygni.	1.18,9	12,1	11,9	11,0	13,9	14,9		5,799	36.6.13,77				52.0.22,20	B.
	κ Piscium.	0.19,8	14,9	12,8	13,1	14,0	14,2			73.40.14,77	30,106	55,9	49,8	89.35.22,85	B.
	ι Piscium R.	2.18,8	12,9	12,9	11,9	14,7	15,9			154.28.46,78				85.12.39,93	B.
	ι Piscium.	2.47,9	41,4	41,1	40,1	42,0	43,8		-2	69.17.42,67				85.12.40,10	B.
	ν N.L.	4.11,4	5,9	5,1	4,2	5,1	7,1	8,361		69.39.38,24	30,100	55,6	48,8	85.34.36,61	B.
	ν N.L.	...	...	...	...	...	...	8,590	-1	69.39.37,05				85.34.35,42	B.
	ν N.L.	...	...	...	...	...	...	8,751		69.39.37,19				85.34.35,56	B.
	ν N.L.	...	...	...	...	...	...	8,953	+1	69.39.36,52				85.34.34,89	B.
	ν N.L.	...	...	...	...	...	...	9,106		69.39.36,89				85.34.35,26	B.
	d Piscium.	0.21,6	15,2	14,6	12,8	15,0	14,9		13,068	66.45.15,68				82.40.7,81	B.
	Polaris R.	4.31,9	25,0	25,0	22,6	25,6	26,5			238.8.26,61	30,098	54,5	48,6	1.31.13,18	B.
	Polaris.	3.9,9	3,0	5,1	3,5	6,1	6,5			345.38.5,64				1.31.16,15	B.
Aug. 30	(e) ⊙ S.L.	3.30,6	28,9	24,4	25,6	26,9	26,4	12,409		65.27.41,63	30,138	60,5	65,5	81.22.29,40	B.
	⊙ N.L.	0.59,0	57,0	53,1	54,5	55,0	53,9			64.55.55,40				80.50.42,18	B.
	Mercury, centre.	0.43,5	45,0	44,0	44,1	45,0	43,7			77.30.45,03	30,134	61,4	64,5	93.26.1,87	B.
	α Ophiuchi R.	1.26,1	22,0	20,4	21,1	24,1	22,0	8,232		162.22.4,20	30,138	61,7	59,2	77.19.6,26	B.
	α Ophiuchi.	4.28,3	23,8	22,1	21,5	25,8	24,9			61.24.24,33				77.19.5,51	B.
	ο Draconis R.	2.24,9	19,9	17,0	16,4	19,3	18,8	9,313		208.52.38,41	30,150	59,9	55,5	30.47.37,38	B.
	ο Draconis.	3.57,7	51,9	51,2	50,7	54,0	54,0			14.53.53,18				30.47.39,69	B.
	17 Lyrae.	4.53,5	47,1	47,0	45,9	48,9	49,9			41.49.48,63				57.44.3,36	B.
	Σ 2499.	0.10,1	3,8	2,9	2,9	6,8	4,9		10,959	52.25.5,23	30,156	59,7		68.19.33,15	B.
	α Cephei R.	1.33,9	28,0	24,9	26,0	29,9	28,1			211.36.13,19	30,184	57,7	52,5	28.3.59,71	B.
	α Cephei.	0.21,2	14,6	15,1	13,9	16,4	16,7			12.10.16,32				28.3.59,94	B.
	(f) π ² Cygni R.	0.25,6	20,7	18,5	19,9	21,3	21,4	7,638	+1½	198.16.15,21	30,188	57,6	51,4	41.24.11,42	B.
	π ² Cygni.	0.19,8	12,2	13,1	11,0	13,2	13,5			25.30.14,40				41.24.11,75	B.
	(g) Venus S.L.	3.22,2	16,9	14,9	13,2	15,9	17,1			58.28.16,68	30,308	58,8	63,4	74.22.52,98	B.
Aug. 31	⊙ N.L.	3.22,1	21,0	16,5	17,1	19,0	19,0	12,476	+2	65.17.32,22	30,314	62,9	67,6	81.12.19,76	B.
	⊙ S.L.	4.19,0	16,8	14,1	15,0	15,9	15,9			65.49.15,63				81.44.4,17	B.
	Mercury, centre.	4.22,4	21,6	17,1	18,2	21,1	19,1			78.4.19,85	50,302	63,5	68,8	93.59.38,19	B.
	52 Herculis R.	1.32,1	27,0	23,0	25,5	26,1	28,1	10,905		195.56.12,84	30,306	59,0	65,6	43.44.16,05	B.
	52 Herculis.	0.19,8	16,2	13,0	13,9	17,1	15,6			27.50.15,93				43.44.15,54	B.
	δ Ursæ Minoris R.	1.29,9	22,8	21,1	21,8	25,7	25,0	12,168		236.15.43,94	30,336	63,5	58,5	3.23.59,23	B.
	δ Ursæ Minoris.	0.50,1	44,2	44,2	43,7	46,6	45,8		12,078	347.30.45,84				3.23.59,73	B.
	17 Lyrae.	0.30,8	24,9	23,3	24,5	25,9	26,7			41.49.47,47	30,338	61,5	56,7	57.44.2,28	B.
	Σ 2466.	1.54,2	48,9	46,5	46,9	50,2	50,2			44.31.40,54				60.26.7,52	B.
	57 Sagittarii.	4.13,0	6,8	5,9	4,8	7,2	7,9		+4½	93.29.6,45		60,2	55,5	109.25.54,01	B.
	* R. 19 ^h . 52 ^m . 19 ^s .	3.64,9	57,1	57,8	56,9	57,9	59,9	11,181		41.13.39,17				57.7.53,34	B.
	Σ 2606.	...	...	...	...	...	...			41.13.59,11				57.8.13,28	B.
	(k) α ² Capricorni R.	4.29,1	24,9	23,7	22,2	26,4	25,9	4,602	+1	136.41.22,54	30,336	60,1	54,8	103.1.6,42	B.
	α ² Capricorni.	0.11,9	6,0	6,0	4,9	7,1	6,1			87.5.6,96				103.1.6,64	B.
	Σ 2681.	0.46,1	39,1	38,9	38,5	40,3	40,2			21.10.41,27				37.4.34,19	B.
	μ Aquarii.	2.52,9	48,0	47,0	45,7	49,1	48,0		11,229	83.37.48,40	30,338	59,7	54,3	99.33.30,68	B.
	β Cephei R.	3.32,9	26,1	25,0	26,8	26,8	29,0			219.33.6,86	30,336	58,9	53,9	20.6.57,37	B.
	β Cephei.	3.29,2	21,9	24,0	22,1	24,0	26,3			4.13.24,53				20.6.59,48	B.

MICROMETER READING for COINCIDENCE with fixed Wire from Aug. 29 = 10^h.208, 10^h.221, 10^h.228, 10^h.237, 10^h.245 at the five wires. ONE REVOLUTION = 20^h.838. CORRECTION for RUNS from Aug. 29 = -0^h.5. ZENITH POINT = 21^h.53'.14^h.64. ASSUMED CO-LATITUDE = 37^h.47'.8^h.28.

(a) Much fringe and motion. (b) Unsteady. Times by M, 13^h.6^m.28^s and 13^h.7^m.16^s. M fast on H, 23^s. (c) At times by M, 18^h.22^m.25^s and 18^h.23^m.20^s. M fast on H, 23^s. (d) At times by M, 1^h.2^m.41^s and 1^h.3^m.55^s. M fast on H, 23^s. (e) Great motion. (f) Unsteady. (g) Very cloudy. Micrometer reading for opposite limb omitted. (h) At times by M, 18^h.22^m.30^s and 18^h.23^m.22^s. M fast on H, 24^s. (i) This was bisected before the preceding star. (k) Indefinite image: too much wind.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Sept. 1	Venus N.L.	1. 14,9	9,8	8,4	6,6	9,9	8,5	8,511		58. 26. 9,67	30,318	60,5	63,3	74. 20. 45,94	G.
	Venus S.L. ....	...	...	...	...	...	...			58. 26. 45,46				74. 21. 21,75	G.
Sept. 2	☉ S.L.	3. 17,1	15,0	12,4	10,9	14,2	11,0	11,122		66. 32. 54,75	30,296	65,1	71,9	82. 27. 44,20	G.
	☉ N.L.	1. 15,1	13,8	9,8	10,0	12,3	9,0			66. 1. 11,65				81. 56. 0,08	G.
	Polaris SP. R.	1. 28,4	20,8	19,0	20,4	21,0	22,9	11,677		241. 10. 51,87	30,266	66,1	73,8	-1. 31. 14,96	G.
	Polaris SP.	0. 43,6	37,1	37,9	36,0	40,8	37,4			342. 35. 38,78				-1. 31. 13,59	G.
	Σ 2643. sp.	1. 57,9	50,1	50,1	50,0	50,3	51,1			77. 31. 51,55	30,210	61,6	55,5	93. 27. 10,17	G.
	Σ 2658. np.	1. 62,4	54,0	53,6	52,9	54,0	55,3			21. 26. 55,33				37. 20. 48,53	G.
	* R. 20 ^h . 11 ^m . 53 ^s .	0. 62,1	54,8	52,9	53,8	55,0	56,6			60. 10. 55,85				76. 5. 35,45	G.
	Σ 2671. sf.	1. 9,0	0,0	0,4	0,0	1,1	2,1			19. 11. 2,08				35. 4. 52,97	G.
	Σ 2681.	0. 48,8	40,0	39,1	39,8	40,2	40,7			21. 10. 41,42				37. 4. 34,34	G.
	(a) * R. 20 ^h . 24 ^m . 13 ^s .	2. 52,5	44,3	43,8	43,8	44,1	46,5	7,916	+1	10. 42. 46,07	30,188	59,7	54,2	26. 36. 28,20	G.
	π Cephei R.	2. 19,8	10,8	9,7	9,7	11,3	12,4			224. 13. 0,43				15. 26. 58,52	G.
	π Cephei	3. 36,1	26,6	28,2	26,8	27,8	30,2			359. 33. 29,22				15. 26. 58,89	G.
	(b) * R. 23 ^h . 56 ^m . 11 ^s .	1. 46,4	36,9	37,0	36,6	37,1	39,9			10. 16. 38,95	30,166	58,2	52,5	26. 10. 20,57	G.
	Venus S.L.	1. 40,2	35,5	32,1	33,1	35,0	34,9			58. 26. 35,27	30,134	61,2	63,0	74. 21. 11,32	G.
	(c) Venus N.L. ....	...	...	...	...	...	...	12,080	+2	58. 25. 57,03				74. 20. 33,07	G.
Sept. 3	(d) ☉ N.L.	4. 18,6	15,8	12,2	13,0	14,2	13,1	13,206		66. 23. 12,36	30,116	66,0	65,7	82. 18. 1,84	G.
	☉ S.L.	4. 60,0	56,1	54,5	53,1	55,8	55,4			66. 54. 55,73				82. 49. 46,25	G.
Sept. 4	☉ S.L.	3. 24,0	20,2	18,0	18,2	20,4	19,8	13,783		67. 17. 5,98	29,998	65,8	69,6	83. 11. 56,17	G.
	☉ N.L.	0. 24,1	22,4	17,2	17,8	19,9	18,0			66. 45. 19,90				82. 40. 9,05	G.
Sept. 5	(c) ☉ N.L.	3. 13,2	8,3	7,1	5,2	7,5	8,2	11,825		67. 7. 34,91	29,850	64,6	67,9	83. 2. 24,70	G.
	☉ S.L.	4. 27,0	21,1	19,3	18,7	20,3	20,9			67. 39. 21,15				83. 34. 11,99	G.
	ζ Aquilæ R.	3. 17,8	11,3	11,9	10,6	11,6	11,9	6,140		163. 19. 37,66	29,838	65,0	62,4	76. 21. 30,86	G.
	ζ Aquilæ	1. 57,6	52,1	49,8	49,4	52,5	51,9			60. 26. 52,18				76. 21. 30,62	G.
	η N.L.	3. 30,0	23,1	23,2	21,2	23,8	23,8	9,326	-2	52. 33. 44,13	29,840	63,8	58,8	68. 28. 11,26	G.
	η N.L. ....	...	...	...	...	...	...	9,359	-1	52. 33. 42,84				68. 28. 9,97	G.
	η N.L. ....	...	...	...	...	...	...	9,269		52. 33. 44,11				68. 28. 11,24	G.
	η N.L. ....	...	...	...	...	...	...	9,277	+1	52. 33. 43,50				68. 28. 10,63	G.
	η N.L. ....	...	...	...	...	...	...	9,344	+2	52. 33. 41,76				68. 28. 8,89	G.
	μ Geminorum.	0. 26,6	21,0	19,0	19,0	21,1	21,1			51. 30. 21,30				67. 24. 47,02	G.
	γ Geminorum.	3. 57,6	52,0	51,0	49,7	51,9	52,0			57. 33. 52,30			61,7	73. 28. 26,32	G.
Sept. 6	(c) Mercury, centre. .	0. 34,1	32,1	27,3	31,2	31,7	29,9			81. 0. 31,03	29,850	70,6	74,0	96. 55. 56,72	G.
	Polaris SP. R.	1. 28,8	21,8	18,9	21,3	21,4	23,0	11,827		241. 10. 49,28			73,8	-1. 31. 11,34	G.
	(e) Polaris SP.	0. 42,1	36,8	36,5	36,9	39,5	37,3			342. 35. 38,17	29,900	64,7	61,2	-1. 31. 13,97	G.
	Σ 2466. np.	1. 55,6	47,1	45,4	45,8	48,9	49,7			44. 31. 48,72				60. 26. 5,73	G.
	53 Draconis R.	1. 55,5	48,0	45,9	47,4	50,8	49,3	11,245		206. 16. 28,34				33. 23. 50,61	G.
	(f) 53 Draconis.	4. 67,5	59,8	59,0	58,9	61,1	60,0			17. 30. 1,05				33. 23. 49,92	G.
	(g) Σ 2504.	3. 56,6	49,0	47,2	48,0	50,8	50,8			55. 13. 50,33				71. 8. 21,05	G.
	(h) Σ 2576. np.	0. 44,3	35,0	35,1	34,9	36,3	37,4			40. 50. 37,15	64,4	59,3		56. 44. 50,04	G.
	b Sagittarii.	0. 34,5	26,0	26,2	25,4	29,3	26,9			101. 35. 28,05				117. 34. 25,51	G.
	* R. 19 ^h . 52 ^m . 19 ^s .	3. 44,5	35,3	36,3	34,7	36,3	38,6			41. 13. 37,55				57. 7. 50,87	G.
	(i) Σ 2606. ....	...	...	...	...	...	...	9,202		41. 13. 59,02				57. 8. 12,34	G.
	Σ 2738. nf.	4. 51,6	44,0	44,0	42,4	45,1	46,8			58. 14. 45,57		62,6	57,5	74. 9. 21,05	G.
	(c) θ Capricorni.	4. 12,0	3,6	5,2	3,3	3,9	4,8			91. 54. 5,40				107. 50. 35,07	G.
	(k) Σ 2757.	3. 57,0	47,9	49,0	46,6	48,1	51,4			22. 18. 49,93				38. 12. 43,60	G.
	* R. 21 ^h . 2 ^m . 18 ^s .	4. 24,9	17,2	17,7	15,8	16,1	18,4			84. 54. 18,28			57,8	100. 50. 3,70	G.
	(l) α Cephei R.	1. 20,6	14,0	12,7	12,4	16,3	14,1			211. 36. 15,00				28. 3. 58,50	G.
	α Cephei.	0. 20,1	11,1	11,4	11,0	12,0	13,1			12. 10. 13,12				28. 3. 56,54	G.
Sept. 10	Mercury, centre. .	0. 64,9	59,7	58,6	59,4	58,4	57,0			82. 25. 59,63	29,810	62,6	63,5	98. 21. 32,65	G.
	μ Aquarii.	2. 56,6	47,0	48,5	46,9	46,2	47,8			83. 37. 48,73	29,900	58,4	52,8	99. 33. 29,37	G.
	θ Capricorni.	3. 70,2	59,2	62,5	60,6	57,3	61,7			91. 54. 1,78				107. 50. 32,97	G.
	* R. 21 ^h . 2 ^m . 18 ^s .	4. 11,9	2,3	4,2	2,5	1,1	4,2	9,597		84. 54. 17,46				100. 50. 4,02	G.
	(m) * R. 21 ^h . 2 ^m . 22 ^s .	2. 61,5	51,5	53,7	52,6	51,2	53,8			84. 2. 53,95				99. 58. 36,47	G.
	(n) Σ 2776.	3. 30,1	21,0	22,3	20,9	18,3	23,0			85. 3. 22,48				100. 59. 9,78	G.

MICROMETER READING FOR COINCIDENCE with fixed Wire = 10',208, 10',221, 10',228, 10',237, 10',245 at the five wires. From Sept. 6 = 10',212, 10',225, 10',232, 10',241, 10',249. ONE REVOLUTION = 20',838. CORRECTION for RUNS = - 0',5. From Sept. 10 = - 1',0. ZENITH POINT = 21°. 53'. 14",64. From Sept. 4 = 21°. 53'. 15",04. ASSUMED CO-LATITUDE = 37°. 47'. 8",28.

(a) Clouds passing, extremely difficult. The star was judged to be of mag. 9,10. (b) Extremely faint. (c) Cloudy. (d) Without the dark glass. (e) Faint, being much clouded. (f) No correction for Runs. (g) Clouded: not seen to be double. (h) The components are nearly equal. (i) Not seen double. (k) Appeared double, but the middle point was bisected. (l) Accidentally on the fixed wire, but not well bisected. (m) Differs 20" in N.P.D. from B. XXI. 27, agreeing in R.A. (n) The brightest and first of three.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle Reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.		Observer.
		A	B	C	D	E	F					Int.	Ext.			
		"	"	"	"	"	"					Inch.	"	"	"	
Sept. 10	1 Capricorni.....	2. 57,6	47,1	50,3	49,0	46,5	49,4			91. 32. 49,88	29,900	57,2	52,0	107. 29. 18,39	G.	
	β Aquarii R.....	1. 18,9	10,0	13,1	10,9	8,4	11,5	7,622		143. 27. 6,49				96. 14. 51,04	G.	
	β Aquarii.....	4. 28,0	19,2	21,2	19,2	18,5	22,1			80. 19. 21,22				96. 14. 48,67	G.	
	β Cephei R.....	4. 28,0	18,0	19,9	17,1	17,4	20,0	13,624	+1	219. 33. 9,02				20. 6. 55,81	G.	
	β Cephei.....	3. 28,0	17,1	21,0	19,0	17,8	21,1		+2	4. 13. 22,18				20. 6. 56,93	G.	
	λ Capricorni.....	3. 44,9	35,9	37,5	35,8	33,9	37,0			86. 8. 37,38			51,4	102. 4. 30,56	G.	
	(a) * R. 21 ^h . 43 ^m . 39 ^s .	1. 53,9	46,1	45,0	44,1	44,9	45,8	4,583		55. 33. 44,28				71. 28. 16,23	G.	
	(b) * R. 21 ^h . 44 ^m . 2 ^s . sp.	...	...	...	...	...	...	8,072		55. 32. 31,58				71. 27. 3,51	G.	
	Σ 2834.....	...	...	...	...	...	...	14,667		55. 30. 14,15				71. 24. 46,02	G.	
	Σ 2878.....	2. 20,2	12,2	12,4	11,6	10,6	12,8	9,843		66. 52. 21,34				82. 47. 12,62	G.	
	Venus S.L.....	3. 63,4	58,0	57,5	55,9	56,9	57,8			58. 38. 58,12	29,988	58,6	56,1	74. 33. 34,47	G.	
	Venus N.L.....	...	...	...	...	...	...	11,830		58. 38. 24,81				74. 33. 1,15	G.	
Sept. 11	(c) ⊙ N.L.....	4. 14,0	10,0	8,9	8,9	8,0	8,4	12,906		69. 23. 13,74	29,996	62,4	63,5	85. 18. 9,00	G.	
	⊙ S.L.....	4. 67,8	61,0	61,4	59,8	60,2	61,1			69. 55. 1,72				85. 49. 58,14	G.	
Sept. 12	(d) ⊙ S.L.....	4. 27,2	23,0	21,1	21,0	21,4	22,2	14,168		70. 18. 0,39	30,016	62,0	64,7	86. 12. 57,55	G.	
Sept. 13	⊙ N.L.....	0. 37,2	32,9	31,5	31,8	32,4	31,5	14,265		70. 9. 8,70	30,146	61,0	63,0	86. 4. 6,02	G.	
	⊙ S.L.....	0. 62,6	58,2	57,1	57,9	56,7	56,0			70. 40. 58,00				86. 35. 56,53	G.	
Sept. 16	⊙ S.L.....	1. 28,0	22,0	20,1	20,8	20,8	21,7	13,245		71. 50. 19,24	29,782	66,0	68,5	87. 45. 18,93	G.	
	⊙ N.L.....	3. 33,9	29,8	26,1	27,0	28,7	29,1			71. 18. 28,82				87. 13. 27,28	G.	
	Mercury, centre..	0. 64,8	61,2	58,2	59,9	60,7	58,5			83. 21. 0,47				99. 16. 36,30	G.	
Sept. 18	Σ 2504. sf.....	3. 56,0	48,0	48,6	47,4	47,0	49,5			55. 13. 49,12	29,968	55,0	50,1	71. 8. 20,78	G.	
	(e) e ¹ Sagittarii. sp...	2. 12,2	2,2	6,5	2,0	4,0	3,1			90. 42. 4,83			49,0	106. 38. 27,93	G.	
	Σ 2576. np.....	0. 43,7	33,8	35,1	34,9	34,7	36,1			40. 50. 36,33				56. 44. 49,68	G.	
	(f) * R. 19 ^h . 52 ^m . 19 ^s .	3. 45,0	34,0	37,4	35,1	33,7	38,0			41. 13. 36,92				57. 7. 50,71	G.	
	Σ 2606.....	...	...	...	...	...	...	9,216		41. 13. 57,99				57. 8. 11,78	G.	
	Σ 2626.....	3. 66,7	55,9	59,8	56,2	55,2	59,0			43. 58. 58,48				59. 53. 15,48	G.	
	Σ 2658. np.....	1. 60,7	50,1	53,7	51,3	51,2	52,2			21. 26. 53,05				37. 20. 45,84	G.	
	Σ 2671. sf.....	0. 67,8	57,1	61,0	57,6	58,0	60,0			19. 11. 0,17				35. 4. 50,65	G.	
	Σ 2681.....	0. 47,5	36,2	39,8	38,0	37,1	38,4			21. 10. 39,45				37. 4. 31,97	G.	
	* R. 21 ^h . 2 ^m . 18 ^s .	3. 14,2	4,4	9,6	4,3	4,4	5,3	6,932		84. 54. 15,44	29,974	52,1	46,3	100. 50. 3,81	G.	
	* R. 21 ^h . 2 ^m . 22 ^s .	2. 60,1	50,0	55,3	49,8	50,0	51,1			84. 2. 52,48				99. 58. 56,75	G.	
	(g) Σ 2776.....	3. 29,7	19,9	23,6	18,8	20,0	21,1			85. 3. 21,92				100. 59. 11,04	G.	
	1 Capricorni.....	3. 35,2	24,2	29,2	25,0	24,8	27,0	12,055		91. 32. 49,20				107. 29. 19,94	G.	
	α Cephei R.....	1. 33,0	27,0	26,2	25,0	27,6	24,9	10,574	+1	211. 36. 19,84				28. 3. 53,40	G.	
	α Cephei.....	0. 17,5	8,2	11,0	10,8	8,4	10,8		+2	12. 10. 12,23				28. 3. 55,39	G.	
	(h) β Cephei R.....	3. 17,7	12,0	12,3	10,0	11,0	9,1	10,166		219. 33. 13,04				20. 6. 51,53	G.	
	β Cephei.....	3. 26,0	17,4	20,7	18,4	16,9	20,3			4. 13. 19,68				20. 6. 54,17	G.	
Sept. 19	(i) ⊙ N.L.....	4. 21,9	16,5	17,0	14,4	13,7	15,6	13,264	+3	72. 28. 12,84	29,930	57,8	59,0	88. 23. 15,68	G.	
	⊙ S.L.....	0. 10,9	6,4	7,6	4,9	4,2	5,8		+4	73. 0. 5,60				88. 55. 9,76	G.	
	(k)) S.L.....	3. 63,4	56,3	58,4	55,8	56,4	57,6	11,056	-2	96. 33. 37,81	29,928	55,5	51,5	112. 31. 0,04	G.	
	) S.L.....	...	...	...	...	...	...	11,142	-1	96. 33. 37,53				112. 30. 59,76	G.	
	) S.L.....	...	...	...	...	...	...	11,237		96. 33. 36,86				112. 30. 59,09	G.	
	) S.L.....	...	...	...	...	...	...	11,304	+1	96. 33. 36,62				112. 30. 58,85	G.	
	) S.L.....	...	...	...	...	...	...	11,350	+2	96. 33. 36,79				112. 30. 59,02	G.	
	α Lyrae R.....	3. 27,9	20,8	23,7	21,6	24,2	22,7	6,940		188. 19. 31,90				51. 21. 5,45	G.	
	α Lyrae.....	1. 62,1	55,3	57,0	56,7	55,9	57,0			35. 26. 57,32				51. 21. 4,59	G.	
	(l) Σ 2369.....	1. 27,0	20,8	20,3	19,3	19,3	20,8			71. 36. 21,23			51,0	87. 31. 23,06	G.	
	Σ 2400.....	0. 11,4	4,0	5,4	4,2	3,8	5,5			58. 0. 5,72				73. 54. 41,42	G.	
	ν ¹ Sagittarii.....	3. 19,3	11,8	14,1	13,2	11,5	14,1			96. 58. 13,97				112. 55. 42,23	G.	
	ο Sagittarii.....	0. 32,9	23,8	25,1	24,4	24,2	24,8			96. 0. 25,87			50,2	111. 57. 41,18	G.	
	(m) Σ 2466.....	1. 55,3	49,0	48,3	47,7	46,8	49,8			44. 31. 49,47				60. 26. 7,04	G.	
	B.A.C. 6590.....	1. 44,3	34,3	38,3	36,7	38,8	38,4			89. 51. 38,45				105. 47. 54,82	G.	
	ρ ³ Sagittarii.....	3. 46,8	38,4	40,5	39,2	38,6	40,1			92. 38. 40,57				108. 35. 19,28	G.	
	e ¹ Sagittarii.....	2. 14,5	4,0	6,8	3,9	3,0	5,9			90. 42. 6,33	29,918	54,0	50,0	106. 38. 28,89	G.	
	ρ Capricorni.....	2. 42,1	33,1	35,3	33,0	32,8	35,5			92. 22. 35,27			53,5	108. 19. 11,69	G.	

MICROMETER READING for COINCIDENCE with fixed Wire = 10',212, 10',225, 10',232, 10',241, 10',249 at the five wires. From Sept. 11 = 10',207, 10',220, 10',227, 10',236, 10',244. From Sept. 19 = 10',205, 10',217, 10',225, 10',231, 10',241. ONE REVOLUTION = 20',838. CORRECTION for RUNS = -1",0. From Sept. 13 = -2",4. From Sept. 19 = -0",3. ZENITH POINT = 21°. 53'. 15",04. ASSUMED CO-LATITUDE = 37°. 47'. 8",28.

(a) Mag. 8,9. (b) Mag. 10. The bisection of this star very uncertain: sp was thought to be taken. (c) Without the dark glass: dazzling. (d) Without the dark glass. (e) The sp of two 30" apart. (f) 'Mag. 8,9.' (g) Precedes the double star. (h) Too close to the fixed wire. (i) Delayed by clouds. Badly defined limbs. (k) Ragged: not quite full. (l) Did not appear double. (m) A close double, observed as single.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	"	"		
Sept. 19	(a) ε Aquarii R.	1. 21,7	12,5	15,4	12,7	11,3	13,5	2,773		139. 38. 49,79	29,918	53,5	49,7	100. 3. 23,95	G.
	ε Aquarii	2. 48,2	39,7	41,2	39,4	39,3	41,6			84. 7. 41,53				100. 3. 25,19	G.
	* R. 21 ^h . 2 ^m . 18 ^s ..	3. 15,8	7,2	8,7	5,6	4,0	8,1	6,882	+4	84. 54. 18,02			49,1	100. 50. 5,51	G.
	* R. 21 ^h . 2 ^m . 22 ^s ..	2. 63,4	53,9	56,3	53,8	53,5	56,0		+4	84. 2. 55,70				99. 58. 39,13	G.
	(b) B. XXI. 222	3. 43,6	34,9	37,9	34,2	33,3	35,8			86. 58. 36,58				102. 54. 34,97	G.
	Capricorni	2. 58,8	50,2	52,4	49,5	47,2	51,5			91. 32. 51,57				107. 29. 21,11	G.
	Venus N.L.	0. 64,8	58,2	59,2	57,8	57,8	57,9			59. 25. 59,27	29,970	52,3	49,0	75. 20. 37,48	G.
	(c) Venus S.L. ....	...	...	...	...	...	...	8,860		59. 26. 27,71				75. 21. 5,93	G.
	Regulus R.	3. 24,2	19,1	20,0	17,2	17,1	18,8	6,534		162. 24. 36,28	29,974	54,0	52,6	77. 16. 34,88	G.
	Regulus	1. 59,0	55,8	54,0	52,5	53,2	53,4			61. 21. 54,63				77. 16. 35,71	G.
	α Ursæ Majoris R.	1. 40,2	36,9	35,0	34,8	34,8	35,0	13,737		212. 15. 22,92	29,998	59,0	58,2	27. 24. 49,88	G.
	α Ursæ Majoris...	1. 13,8	9,5	10,7	8,3	8,8	8,2			11. 31. 9,87				27. 24. 52,59	G.
Sept. 20	(d) ☉ S.L.	4. 22,1	19,2	18,7	17,2	17,0	17,8	12,797		73. 23. 25,02	29,988	60,0	62,2	89. 18. 29,85	G.
	☉ N.L.	1. 34,8	32,4	30,4	30,0	31,0	30,0			72. 51. 31,42				88. 46. 34,91	G.
	☽ S.L.	3. 34,4	30,0	29,4	28,8	28,7	28,9	1,734	-2	94. 26. 22,27	30,000	56,4	52,6	110. 23. 18,44	G.
	☽ S.L. ....	...	...	...	...	...	...	1,830	-1	94. 26. 22,70				110. 23. 18,87	G.
	☽ S.L. ....	...	...	...	...	...	...	1,957		94. 26. 22,29				110. 23. 18,46	G.
	☽ S.L. ....	...	...	...	...	...	...	2,041	+1	94. 26. 22,63				110. 23. 18,80	G.
	☽ S.L. ....	...	...	...	...	...	...	2,169	+2	94. 26. 22,03				110. 23. 18,20	G.
	(e) γ Pegasi R.	4. 22,0	17,8	17,6	15,6	16,4	17,5	6,470		164. 0. 36,01	30,016	53,6	48,3	75. 40. 32,96	G.
	γ Pegasi	0. 58,9	54,0	52,9	52,8	53,2	53,9			59. 45. 54,27				75. 40. 33,16	G.
	β Ceti R.	1. 15,4	12,1	10,4	10,2	10,0	9,6	4,840		130. 53. 3,48			47,2	108. 50. 9,11	G.
	β Ceti	3. 30,0	24,4	25,1	24,0	23,0	23,6			92. 53. 24,98				108. 50. 7,49	G.
	φ ³ Ceti	0. 40,8	35,0	34,6	35,0	35,2	34,7	10,908		86. 10. 21,65				102. 6. 16,48	G.
	(f) * R. 0 ^h . 49 ^m . 47 ^s .	3. 61,7	56,2	57,7	55,1	55,2	56,7			87. 8. 57,07				103. 4. 57,35	G.
	28 Ceti	4. 25,3	19,9	21,0	18,7	17,4	19,8			84. 44. 20,30				100. 40. 7,81	G.
Sept. 21	η Ceti	4. 25,9	20,1	20,8	18,4	18,7	19,8			85. 4. 20,57				101. 0. 9,71	G.
	Venus S.L.	4. 9,0	5,9	4,7	3,6	5,0	4,8			59. 34. 5,47	30,074	55,8	57,3	75. 28. 43,30	G.
	Venus N.L. ....	...	...	...	...	...	...	11,605		59. 33. 36,71				75. 28. 14,53	G.
	(g) ☽ S.L.	4. 38,8	31,8	32,8	32,0	31,6	33,5	11,238	-2	91. 9. 6,27	30,120	54,7	52,1	107. 5. 32,70	G.
	☽ S.L. ....	...	...	...	...	...	...	11,420	-1	91. 9. 5,56				107. 5. 31,99	G.
	☽ S.L. ....	...	...	...	...	...	...	11,576		91. 9. 5,22				107. 5. 31,65	G.
	☽ S.L. ....	...	...	...	...	...	...	11,730	+1	91. 9. 4,78				107. 5. 31,21	G.
	☽ S.L. ....	...	...	...	...	...	...	11,910	+2	91. 9. 3,82				107. 5. 30,25	G.
	ν Capricorni	3. 67,0	60,6	60,9	60,8	59,0	62,0			92. 44. 1,68			51,0	108. 40. 42,00	G.
	μ Aquarii	2. 53,7	47,9	47,6	46,8	46,9	47,0			83. 37. 48,28				99. 33. 30,10	G.
	* R. 21 ^h . 2 ^m . 18 ^s ..	4. 20,5	13,7	14,7	14,2	11,9	15,3			84. 54. 15,00	30,110	52,8	48,7	100. 50. 3,32	G.
	B. XXI. 222	3. 39,8	32,8	33,8	33,0	31,3	34,3			86. 58. 34,13				102. 54. 33,42	G.
	(h) * R. 21 ^h . 43 ^m . 39 ^s .	2. 16,7	10,2	9,0	9,7	7,3	10,8	5,832		55. 33. 42,14			47,3	71. 28. 14,69	G.
	(h) Σ 2834 .....	...	...	...	...	...	...	15,853		55. 30. 13,32				71. 24. 45,79	G.
Sept. 23	Σ 2848. sp.	2. 41,6	35,9	34,7	35,1	31,2	36,9			68. 52. 35,87				84. 47. 32,30	G.
	Σ 2861. nf.	2. 17,0	11,0	9,0	10,3	9,2	11,8			54. 2. 11,37				69. 56. 41,69	G.
	γ Pegasi R.	4. 13,5	7,0	10,1	5,1	5,9	7,1	5,988		164. 0. 36,38	30,108	50,8	44,9	75. 40. 33,05	G.
	γ Pegasi	0. 58,6	51,6	51,9	51,6	49,8	51,6			59. 45. 52,50				75. 40. 31,85	G.
	β Ceti R.	1. 18,2	10,8	12,9	10,4	10,1	9,8	4,762		130. 53. 5,86			45,5	108. 50. 7,84	G.
	β Ceti	3. 33,0	23,9	27,1	24,9	22,3	24,3			92. 53. 25,88				108. 50. 9,50	G.
	B. o. 962	3. 62,2	55,0	58,0	55,0	53,6	54,9			85. 33. 56,42	30,100	50,7	47,0	101. 29. 48,45	G.
	* R. 0 ^h . 58 ^m . 7 ^s ..	3. 44,5	37,1	39,1	37,7	36,2	36,6			83. 33. 38,50				99. 29. 20,84	G.
	(i) ☉ N.L.	3. 18,8	15,1	13,9	13,5	15,3	15,4	14,969		74. 1. 36,45	29,720	56,7	57,9	89. 56. 42,90	B.
	☉ S.L.	3. 33,1	30,0	29,2	29,0	29,8	31,0		+2	74. 33. 30,32				90. 28. 38,18	B.
	Venus S.L.	4. 54,9	51,0	50,9	49,8	51,6	52,1			59. 59. 51,67	29,888	54,3	56,3	75. 54. 30,01	B.
	Venus N.L. ....	...	...	...	...	...	...	11,617		59. 59. 22,66				75. 54. 0,99	B.
Sept. 24	ε ¹ Sagittarii. sp.	2. 10,5	4,0	4,9	4,1	5,1	5,0			90. 42. 5,58	30,050	56,0	51,3	106. 38. 28,38	B.
	Σ 2576	0. 40,8	35,0	33,1	33,9	33,3	36,8			40. 50. 35,48				56. 44. 48,79	B.
	(k) α ² Capricorni R.	0. 20,5	15,3	14,5	13,1	14,9	15,7	7,070		136. 41. 21,40	30,058	54,5	49,9	103. 1. 8,06	B.
	α ² Capricorni	0. 11,0	15,1	5,2	3,7	14,5	15,7		+2	87. 5. 9,09				103. 1. 8,47	B.
	α Cygni R.	4. 24,1	19,7	19,5	17,8	19,0	21,1	9,480		194. 24. 35,67	30,012	53,8	49,1	45. 15. 55,34	B.
	α Cygni	1. 57,9	52,9	51,7	51,9	53,1	54,4			29. 21. 53,63				45. 15. 54,56	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',205, 10',217, 10',225, 10',231, 10',241 at the five wires.
 ONE REVOLUTION = 20'',838. CORRECTION for RUNS = - 0'',3. ZENITH POINT = 21°. 53'. 15'',04. ASSUMED Co-LATITUDE = 37°. 47'. 8'',28.

(a) The micrometer reading has been diminished by 5'. (b) No other near. (c) Faint from haze. (d) Bad definition. (e) Indefinite image.
 (f) Very cloudy. The star was judged to be of 7,8 Mag. (g) Much clouded. I am unable to account for the continual decrease of the circle readings: the fixed wire was in adjustment. (h) The double star between these was too faint to be observed. (i) This limb was much clouded.
 (k) Observed hurriedly.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					"	"		
Sept. 24	ν Aquarii	1.32,5	27,0	26,9	25,9	27,0	27,6	18,219	+2	86. 3. 41,42	30,070	53,7	47,5	101. 59. 35,80	B.
	* R. 21 ^h . 2 ^m . 18 ^s .	4.20,0	14,8	15,9	13,8	15,0	16,0		+1	84. 54. 15,84				100. 50. 4,29	B.
	B. XXI. 222.....	3.38,6	33,1	33,2	31,1	33,1	33,9			86. 58. 33,80				102. 54. 33,23	B.
	(a) π ² Cygni.....	0.14,0	8,9	7,7	7,7	8,1	9,5	10,320		25. 30. 7,34	30,072	53,1	46,8	41. 24. 4,31	B.
	(b)* R. 21 ^h . 43 ^m . 39 ^s .	3.43,6	38,0	37,0	35,2	37,6	39,2			55. 33. 38,40				71. 28. 10,94	B.
	Σ 2861. <i>nf</i>	2.13,9	8,1	6,8	6,4	7,4	9,1			54. 2. 8,60	30,078	52,1	47,0	69. 56. 38,91	B.
	(c) Σ 2882.....	2.15,8	8,9	7,0	6,1	6,5	9,9	10,990		37. 6. 53,08				53. 1. 2,38	B.
	Σ 2889.....	0.13,0	14,1	12,9	12,4	13,4	16,5			48. 35. 13,72				64. 29. 36,63	B.
	γ Aquarii	4.38,1	31,3	33,1	30,1	31,2	33,9		+2½	76. 14. 32,86				92. 10. 9,48	B.
	η Aquarii	4.34,6	27,2	28,8	25,1	27,7	30,6			74. 59. 28,95				90. 54. 40,62	B.
	δ S.L.....	4.15,0	7,6	11,1	9,0	10,4	11,6	8,152	-2	77. 14. 46,62		51,3	46,1	93. 10. 5,21	B.
	δ S.L.....	...	...	...	...	...	...	8,357	-1	77. 14. 46,06				93. 10. 4,65	B.
	δ S.L.....	...	...	...	...	...	...	8,542		77. 14. 45,82				93. 10. 4,41	B.
	δ S.L.....	...	...	...	...	...	...	8,723	+1	77. 14. 45,63				93. 10. 4,22	B.
	δ S.L.....	...	...	...	...	...	...	8,911	+2	77. 14. 45,34				93. 10. 3,93	B.
	γ Piscium.....	3.41,6	33,6	34,9	33,2	33,9	37,2			71. 38. 35,70	30,080	50,9	45,7	87. 33. 38,73	B.
	κ Piscium.....	0.17,0	10,9	11,5	10,1	9,9	12,2			73. 40. 11,93				89. 35. 20,17	B.
	ψ Andromedæ R.	3.30,1	24,1	26,1	23,1	26,7	27,0	7,843		195. 14. 15,79		50,7	44,8	44. 26. 14,44	B.
	(d) ψ Andromedæ ...	2.19,0	13,1	13,4	12,0	12,1	14,9		+1½	28. 32. 14,41				44. 26. 14,56	B.
	Σ 3062.....	1.50,8	45,0	44,9	44,0	44,3	46,1			16. 31. 45,83				32. 25. 33,51	B.
Sept. 25	(e) ⊙ N.L.....	4.16,1	13,1	13,9	12,9	13,0	14,3	12,665	+1½	74. 48. 22,89	30,180	57,6	57,6	90. 43. 32,63	B.
	⊙ S.L.....	0.23,0	20,2	19,9	19,1	20,1	20,0		+3	75. 20. 19,55				91. 15. 30,79	B.
	(f)* R. 19 ^h . 5 ^m . 36 ^s .	3. 8,0	4,0	1,8	2,0	3,3	4,1			55. 8. 3,83	30,200	56,2	52,7	71. 2. 35,44	G.
	(g) Σ 2482.....	...	...	...	...	...	...	88,010		55. 12. 18,49				71. 6. 50,20	G.
	(h) B.A.C. 6590.....	1.42,4	36,0	37,5	36,1	37,9	37,4			89. 51. 37,87				105. 47. 54,81	G.
	ρ ² Sagittarii.....	3.42,8	37,9	38,2	37,4	37,2	39,0		-2	92. 38. 38,51				108. 35. 17,88	G.
	(i)* R. 19 ^h . 13 ^m . 26 ^s .	3.33,1	27,5	27,8	27,5	27,5	28,4			94. 58. 28,60				110. 55. 32,00	G.
	e ¹ Sagittarii	2.10,2	4,5	4,4	3,8	6,3	5,7			90. 42. 5,80	30,204	55,6	51,4	106. 38. 29,34	B.
	ρ Capricorni.....	2.37,9	33,1	32,0	33,3	34,7	34,2			92. 22. 34,17	30,208	55,0	50,1	108. 19. 11,87	B.
	α Cygni R.....	4.10,7	7,0	7,0	5,8	8,1	7,2	8,935		194. 24. 34,62	30,212	54,9	49,9	45. 15. 56,43	B.
	α Cygni.....	1.57,2	52,1	52,0	51,2	54,6	54,9			29. 21. 53,65				45. 15. 54,62	B.
	ν Aquarii.....	3.44,9	40,7	41,0	40,0	42,4	41,8			86. 3. 41,77	30,214	54,7	49,1	101. 59. 36,33	B.
	B. XXI. 222.....	3.41,3	36,3	37,7	35,8	38,6	37,3	10,372		86. 58. 34,87				102. 54. 34,48	B.
	α Cephei R.....	1.31,2	27,1	24,1	25,7	28,9	25,9	10,499		211. 36. 21,54				28. 3. 51,67	B.
	α Cephei.....	0.13,8	8,4	8,9	8,1	10,0	10,1			12. 10. 9,88				28. 3. 53,01	B.
	(k) ν Cephei R.....	4.21,0	17,9	17,0	15,9	18,2	18,1	8,301		210. 4. 58,24				29. 35. 16,58	B.
	ν Cephei.....	1.38,0	32,0	31,7	31,1	34,8	33,0			13. 41. 33,42				29. 35. 18,16	B.
	Σ 2848. <i>sp</i>	2.38,1	32,9	32,5	31,4	35,2	35,2			68. 52. 34,18	30,216	53,4	46,5	84. 47. 30,94	B.
	(l) θ Aquarii R.....	2.27,6	23,2	22,3	19,9	25,2	23,8	4,802		141. 9. 16,79	30,220	52,7	45,8	98. 32. 52,18	B.
	θ Aquarii.....	2.24,4	19,2	19,2	17,3	19,9	20,8		+1½	82. 37. 20,07				98. 32. 58,96	B.
	γ Piscium.....	3.38,4	32,8	33,7	30,1	35,6	35,1			71. 38. 34,25	30,216	50,1	45,0	87. 33. 37,70	B.
	κ Piscium.....	0.15,9	11,1	11,1	8,9	11,4	11,7			73. 40. 11,68				89. 35. 20,36	B.
	δ N.L.....	0.60,9	56,1	56,3	55,9	57,3	57,7	6,563	-2	71. 42. 6,67		49,9	43,8	87. 37. 10,44	B.
	δ N.L.....	...	...	...	...	...	...	6,756	-1	71. 42. 6,25				87. 37. 10,02	B.
	δ N.L.....	...	...	...	...	...	...	6,929		71. 42. 6,15				87. 37. 9,92	B.
	δ N.L.....	...	...	...	...	...	...	7,077	+1	71. 42. 6,56				87. 37. 10,33	B.
	δ N.L.....	...	...	...	...	...	...	7,272	+2	71. 42. 6,09				87. 37. 9,86	B.
Sept. 26	ω Piscium R.....	1.25,9	22,9	22,2	22,0	22,9	23,0	8,697		155. 41. 55,10				83. 59. 26,34	B.
	ω Piscium.....	4.40,0	34,0	34,5	30,1	35,0	37,0		+1	68. 4. 35,06				83. 59. 30,42	B.
	d Piscium.....	0.17,0	11,5	11,9	9,1	12,9	13,2			66. 45. 12,60	30,214	49,6	43,3	82. 40. 5,22	B.
	Venus N.L.....	3.62,1	58,0	58,4	56,0	59,0	59,2			60. 18. 58,75	30,240	52,3	49,4	76. 13. 38,79	B.
	Venus S.L.....	...	...	...	...	...	...	8,994		60. 19. 24,54				76. 14. 4,59	B.
	(m) ⊙ S.L.....	0.25,8	24,3	21,5	23,1	24,2	23,1	15,079		75. 43. 42,66	30,236	56,9	60,4	91. 38. 54,71	B.
	⊙ N.L.....	1.50,1	48,3	44,8	47,0	48,1	46,8			75. 11. 47,60				91. 6. 58,14	B.
	(n) Polaris SP. R.....	1.40,2	38,9	33,3	36,2	37,4	38,0	12,928		241. 10. 42,68	30,228	57,6	61,8	-1. 31. 6,41	B.
	Polaris SP.....	0.55,1	51,0	51,0	52,0	52,9	53,0			342. 35. 50,36				-1. 31. 3,45	B.
	(o) Arcturus R.....	0.15,8	12,3	11,0	11,8	13,7	13,8	8,853		169. 40. 41,79	30,212	59,2	62,5	70. 0. 17,70	B.
	Arcturus.....	0.48,2	47,9	41,9	45,2	46,9	45,2			54. 5. 45,92				70. 0. 15,33	B.
	(p) α Coronæ Bor. R.	0.24,1	21,9	20,8	22,2	23,6	23,8	9,961		176. 55. 28,38	30,200	59,9	63,0	62. 45. 21,63	B.
	α Coronæ Borealis.	0.61,9	60,5	57,0	58,9	60,2	58,9		+2	46. 50. 59,93				62. 45. 19,86	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10',205, 10',217, 10',225, 10',231, 10',241 at the five wires.
 From Sept. 25 = 10',211, 10',223, 10',231, 10',237, 10',247. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = -0'',3.
 From Sept. 26 = +1'',4. ZENITH POINT = 21° 53'. 15'',04. ASSUMED CO-LATITUDE = 37° 47'. 8'',28.

(a) Close to the fixed wire. (b) Extremely faint. (c) The micrometer reading has been diminished 1'. (d) Delayed by the eye-piece falling out. (e) Without the dark glass: S.L. very much clouded. (f) 'Mag. 8,9.' (g) 'Mag. 8.' (h) 'Mag. 6,7.' (i) Estimated at Mag. 7,8. (k) Unsteady. This star is α Cephei of the A.S.C. (l) Indefinite on account of wind. (m) Much fringed and very unsteady. (n) At times by M, 13^h. 9^m. 57^s and 13^h. 10^m. 48^s. M fast on H, 41^s. (o) Indistinct and unsteady. (p) Great motion.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	"	"		
Sept. 26	Σ 2482.....	2. 23,0	20,8	16,8	19,0	21,9	21,4			55. 12. 20,60	30,186	56,9	54,1	71. 6. 52,19	B.
	B.A.C. 6590.....	1. 43,7	40,2	39,1	40,7	42,7	41,9			89. 51. 41,47				105. 47. 57,94	B.
	* R. 19 ^h . 13 ^m . 26 ^s .	3. 34,8	31,0	29,0	30,4	32,1	32,0			94. 58. 31,72				110. 55. 34,50	B.
	ρ Capricorni.....	2. 38,9	35,1	32,7	34,7	35,9	37,0			92. 22. 35,83	30,188	56,7	55,1	108. 19. 11,91	B.
	B. XXI. 222.....	3. 37,2	31,9	32,2	31,8	32,8	34,9			86. 58. 33,63	30,190	55,0	48,7	102. 54. 33,25	B.
	μ Capricorni.....	0. 31,0	25,1	24,1	25,8	26,0	27,9			88. 20. 26,67	30,184	53,9	47,9	104. 16. 34,69	B.
	δ Cephei R.....	2. 33,8	31,1	28,0	28,1	30,8	31,1	9,018		207. 17. 55,88		52,8	46,8	32. 22. 21,83	B.
	δ Cephei.....	3. 39,9	34,1	34,2	33,1	33,5	38,9			16. 28. 35,78				32. 22. 23,41	B.
	κ Aquarii.....	0. 61,6	56,0	56,8	55,9	57,0	58,8			79. 5. 57,73				95. 1. 22,66	B.
	τ ¹ Aquarii.....	0. 62,1	56,5	57,5	56,0	57,2	58,8			88. 55. 58,07				104. 52. 10,25	B.
	(a) ω Piscium.....	4. 40,4	34,3	35,7	32,9	35,0	39,0			68. 4. 36,43	30,172	51,2	44,0	83. 59. 31,67	B.
	d Piscium.....	0. 17,0	10,9	12,2	9,3	11,7	13,0			66. 45. 12,37	30,168	50,8		82. 40. 4,81	B.
	(b) N.L.....	0. 27,5	21,7	21,4	19,5	21,4	22,7	14,540	-2	66. 53. 45,93	30,164	50,4	44,6	82. 48. 38,59	B.
	N.L.....	...	...	...	...	...	...	14,691	-1	66. 53. 46,13				82. 48. 38,79	B.
	N.L.....	...	...	...	...	...	...	14,885		66. 53. 45,41				82. 48. 38,07	B.
	N.L.....	...	...	...	...	...	...	15,061	+1	66. 53. 45,04				82. 48. 37,70	B.
	N.L.....	...	...	...	...	...	...	15,202	+2	66. 53. 45,54				82. 48. 38,20	B.
	δ Piscium.....	0. 36,8	29,9	31,0	29,2	31,4	32,7			67. 20. 31,85				83. 15. 25,44	B.
	ε Piscium.....	1. 47,0	41,2	41,2	39,9	42,4	43,1			67. 1. 42,55	30,160	50,2	44,4	82. 56. 35,50	B.
	Venus S.L.....	4. 59,8	56,6	56,2	54,4	56,0	56,8			60. 29. 56,87	30,156	53,9	51,2	76. 24. 36,92	B.
	Venus N.L.....	...	...	...	...	...	...	11,490		60. 29. 30,63				76. 24. 10,67	B.
Sept. 27	(c) ⊙ N.L.....	1. 26,0	23,1	23,0	23,4	24,2	23,8	13,930		75. 35. 6,90	30,140	56,5	61,4	91. 30. 18,14	B.
	S.L.....	2. 7,8	6,4	4,0	4,9	5,2	5,1		+2	76. 7. 5,11				92. 2. 17,88	B.
	(d) Polaris SP. R.....	1. 28,0	24,8	21,5	23,2	23,7	25,7	12,301		241. 10. 41,49	30,136	56,8	61,3	-1. 31. 5,12	B.
	Polaris SP.....	0. 53,1	48,0	49,1	48,3	51,4	49,9			342. 35. 50,00				-1. 31. 3,71	B.
	(e) Σ 2415. sf.....	4. 48,1	44,1	43,7	43,0	46,5	45,6			53. 39. 45,38	30,100	57,9	56,6	69. 34. 14,47	B.
	H. C. 35690.....	2. 39,9	35,9	33,3	33,4	37,1	36,0			50. 57. 36,05				66. 52. 1,47	B.
	Σ 2445.....	...	...	...	...	...	...	5,603		50. 59. 12,49				66. 53. 37,95	B.
	* R. 19 ^h . 5 ^m . 36 ^s .	3. 6,6	2,7	0,6	1,1	3,6	2,8			55. 8. 3,05				71. 2. 34,23	B.
	B.A.C. 6590.....	1. 44,1	39,0	39,2	37,8	42,1	40,0		+1	89. 51. 40,39				105. 47. 55,71	B.
	* R. 19 ^h . 13 ^m . 26 ^s .	3. 35,8	31,1	30,3	30,7	32,1	32,0			94. 58. 32,17	30,092	58,0	56,3	110. 55. 33,49	B.
	ω ³ Cygni R.....	0. 56,9	53,2	50,9	52,1	52,9	54,2	7,730		198. 6. 45,54		56,7	51,1	41. 33. 41,64	B.
	ω ² Cygni.....	4. 46,0	42,0	40,3	39,8	42,7	43,7		+1½	25. 39. 43,01				41. 33. 40,11	B.
	B. XXI. 222.....	3. 39,1	33,3	33,4	31,9	34,0	35,2			86. 58. 34,65	30,090	55,6	50,0	102. 54. 33,52	B.
	Σ 2902. sp.....	1. 43,7	38,0	38,0	37,6	37,7	40,7		+4½	29. 31. 42,37		55,0	48,7	45. 25. 43,50	B.
	Σ 2916.....	0. 14,9	9,9	8,2	7,9	9,8	11,7			33. 40. 10,40				49. 34. 15,91	B.
	κ Aquarii.....	0. 60,7	56,9	56,3	55,4	57,4	57,1			79. 5. 57,35				95. 1. 21,64	B.
	τ ¹ Aquarii.....	0. 61,0	56,0	56,3	54,9	57,3	56,2			88. 55. 57,00	30,086	54,2	47,7	104. 52. 8,47	B.
	8 Andromedæ R.....	4. 23,8	20,7	18,8	19,1	19,8	22,2	6,057		197. 50. 47,92	30,074	53,3	47,5	41. 49. 39,56	B.
	8 Andromedæ.....	0. 45,0	41,0	38,1	38,9	40,0	41,1		+1	25. 55. 40,89				41. 49. 38,29	B.
	ψ Andromedæ R.....	3. 26,1	23,6	22,9	22,6	23,9	24,3	7,746		195. 14. 15,86	30,070	52,9	46,9	44. 26. 14,34	B.
	ψ Andromedæ.....	2. 17,8	11,9	12,2	11,7	12,2	14,4			28. 32. 13,47				44. 26. 13,59	B.
	33 Piscium.....	1. 30,3	26,1	24,3	24,1	26,9	28,0	17,841		80. 38. 48,10				96. 34. 18,29	B.
	Σ 3062.....	1. 48,8	43,1	43,2	42,9	43,2	45,3			16. 31. 44,50				32. 25. 32,21	B.
	δ Piscium.....	0. 36,2	29,9	30,9	29,5	32,2	33,4			67. 20. 32,03	30,062	51,9	46,1	83. 15. 25,23	B.
	φ ³ Ceti.....	0. 25,9	19,1	19,2	19,4	20,7	21,1			86. 10. 20,92				102. 6. 16,22	B.
	ε Piscium.....	1. 47,1	41,5	41,8	40,8	43,1	43,8			67. 1. 43,10				82. 56. 35,65	B.
	Polaris R.....	4. 34,9	30,7	28,9	30,4	30,7	32,7	12,854		238. 8. 36,93	30,064	51,8	45,5	1. 31. 3,03	B.
	(f) Polaris.....	2. 59,9	52,8	54,6	54,5	56,0	57,0			345. 37. 56,15				1. 31. 6,03	B.
	N.L.....	2. 22,9	17,0	17,2	16,9	17,7	20,2	13,470	-2	62. 31. 5,31				78. 25. 49,27	B.
	N.L.....	...	...	...	...	...	...	13,641	-1	62. 31. 4,72				78. 25. 48,68	B.
	N.L.....	...	...	...	...	...	...	13,796		62. 31. 4,47				78. 25. 48,43	B.
	N.L.....	...	...	...	...	...	...	13,922	+1	62. 31. 4,83				78. 25. 48,79	B.
	N.L.....	...	...	...	...	...	...	14,095	+2	62. 31. 4,36				78. 25. 48,32	B.
Sept. 28	π Piscium.....	4. 25,2	18,0	20,0	16,9	19,1	22,1			62. 44. 20,42	30,052	51,0	44,5	78. 39. 4,86	B.
	β Arietis.....	2. 34,8	28,1	28,2	27,1	28,2	30,9			54. 2. 29,67	30,050	50,9	44,6	69. 57. 0,14	B.
	Venus N.L.....	0. 35,0	31,1	29,0	29,5	30,2	31,5		+2	60. 40. 30,95	30,020	52,8	50,5	76. 35. 11,15	B.
	Venus S.L.....	...	...	...	...	...	...	9,040	+2	60. 40. 56,11				76. 35. 36,32	B.
	⊙ S.L.....	2. 34,2	32,7	29,1	32,2	32,6	31,4	16,079		76. 30. 30,29	30,000	58,6	63,4	92. 25. 43,51	B.
	⊙ N.L.....	3. 31,8	31,1	28,2	29,8	30,3	30,0			75. 58. 30,37				91. 53. 42,04	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10",211, 10",223, 10",231, 10",237, 10",247 at the five wires. ONE REVOLUTION = 20",838. CORRECTION for RUNS = + 1",4. ZENITH POINT = 21°. 53'. 15",04. ASSUMED CO-LATITUDE = 37°. 47'. 8",28.

(a) Too much wind for the reflection observation. (b) Much waving. (c) Great motion. (d) Very unsteady. Times by M, 13^h. 3^m. 7^s and 13^h. 4^m. 16^s. M fast on H, 42". (e) The minutes were verified. (f) At times by M, 1^h. 4^m. 51^s and 1^h. 6^m. 26^s. M fast on H, 43". Bad definition.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Sept. 28	B.A.C. 6590.....	1.43,9	41,0	38,6	39,9	42,0	41,1			89.51.41,17	29,920	58,7	56,4	105.47.55,71	B.
	* R. 19 ^h . 13 ^m . 26 ^s .	3.37,0	33,0	31,5	33,2	34,0	34,1			94.58.33,97				110.55.34,20	B.
	δ Cygni R.....	0.32,8	30,8	27,0	28,9	29,1	30,3	8,230		194.26.11,53		58,0	55,6	45.14.19,33	B.
	δ Cygni.....	0.20,9	16,9	14,7	15,0	17,8	17,9			29.20.17,22				45.14.18,00	B.
	Σ 2902. sp.....	2.34,8	28,0	28,8	28,0	28,0	31,4	12,340		29.31.46,00		53,0	47,3	45.25.47,11	B.
	δ Cephei R.....	2.21,1	19,0	16,1	16,0	18,8	18,9	8,432		207.17.55,92				32.22.21,84	B.
	δ Cephei.....	3.37,6	32,0	32,2	30,8	32,2	35,0			16.28.33,47				32.22.21,15	B.
	3 Piscium.....	3.25,9	20,1	21,0	19,9	20,9	23,5			74.43.22,03	29,912	53,7	46,6	90.38.32,58	B.
	ψ Andromedæ R..	3.34,6	30,8	29,9	28,9	31,9	31,7	8,069		195.14.16,52	29,908	52,7		44.26.13,65	B.
	ψ Andromedæ....	2.17,8	11,2	12,0	10,8	10,4	14,8			28.32.12,93				44.26.13,02	B.
	π Piscium.....	4.26,6	24,0	21,8	20,0	22,7	25,8			62.44.23,68	29,884	53,0	50,6	78.39.7,20	B.
	β Arietis.....	2.36,0	30,8	28,7	29,7	31,1	33,0			54.2.31,67				69.57.1,48	B.
	) N.L.....	0.29,1	24,1	23,0	23,0	25,1	27,9	10,720	-2	58.45.10,18	29,888	52,8	46,1	74.39.47,44	B.
	) N.L.....	...	...	...	...	...	...	10,848	-1	58.45.10,02				74.39.47,28	B.
	) N.L.....	...	...	...	...	...	...	10,931		58.45.10,79				74.39.48,05	B.
	) N.L.....	...	...	...	...	...	...	11,100	+1	58.45.9,82				74.39.47,08	B.
	) N.L.....	...	...	...	...	...	...	11,176	+2	58.45.10,95				74.39.48,21	B.
	(a) ν Arietis.....	3.36,4	30,0	30,5	29,2	32,1	33,4	11,176		52.48.12,41		52,2	44,8	68.42.40,91	B.
	π Arietis.....	1.45,9	39,4	39,0	38,1	41,3	42,5	11,176		57.16.21,43				73.10.56,48	B.
Sept. 30	(b) ☉ S.L.....	3.13,7	11,0	10,1	10,1	10,0	10,7	13,109		77.17.11,10	30,300	54,8	55,4	93.12.28,82	B.
	☉ N.L.....	0.13,9	10,9	8,8	11,0	9,9	8,4			76.45.10,50				92.40.26,55	B.
	(c) Polaris SP. R....	1.26,2	21,0	20,0	20,7	21,1	23,0	12,179		241.10.41,42				-1.31.5,87	B.
	Polaris SP.....	0.55,4	50,0	51,1	51,1	52,6	51,0			342.35.51,89				-1.31.2,64	B.
	(d) Arcturus R.....	0.15,6	12,4	11,0	13,1	13,3	12,4	8,870		169.40.41,34	30,280	56,9	58,4	70.0.18,53	B.
	Arcturus.....	0.51,1	48,2	45,1	46,9	48,7	46,4			54.5.47,77				70.0.17,56	B.
	B.A.C. 6590.....	1.43,4	36,1	36,4	35,7	38,6	37,7			89.51.38,07	30,218	53,8	46,6	105.47.56,91	B.
	* R. 19 ^h . 13 ^m . 26 ^s .	3.33,0	27,1	27,9	26,0	28,1	28,2			94.58.28,55				110.55.34,48	B.
	α Cephei R.....	1.43,7	39,9	37,2	39,5	40,1	40,6	11,081		211.36.22,54	30,192	50,8	44,2	28.3.50,58	B.
	α Cephei.....	0.14,8	7,9	9,0	7,2	7,4	10,7			12.10.9,50				28.3.52,54	B.
	π ² Cygni R.....	0.32,8	28,9	26,9	28,1	28,2	29,0	7,512		198.16.25,57	30,188	50,5	43,8	41.24.1,51	B.
	π ² Cygni.....	0.10,3	4,0	5,8	4,0	4,8	6,8			25.30.5,95				41.24.2,95	B.
	(e) * R. 22 ^h . 36 ^m . 2 ^s .	1.32,4	25,6	27,3	26,2	26,0	29,2			8.21.27,85	30,170	49,4	44,2	24.15.6,77	B.
	(f) H. C. 47310.....	2.23,1	17,3	17,4	15,9	16,1	20,0	13,609	+1	37.41.8,24	30,146	48,0	43,0	53.35.18,35	B.
	β Cassiopeiæ.....	3.29,9	23,2	25,7	22,8	23,2	26,1			15.48.25,32				31.42.12,21	B.
	55 Piscium.....	0.12,8	5,8	7,5	4,8	6,1	7,7			53.30.7,47	30,138	47,8	42,5	69.24.37,43	B.
	(g) i Piscium. np.....	3.42,1	32,8	35,5	31,6	34,1	37,1			47.13.35,70				63.7.57,19	B.
	Polaris R.....	4.30,6	27,0	25,0	26,1	25,0	29,8	12,581		238.8.38,17	30,134	47,6	42,3	1.31.1,40	B.
	(h) Polaris.....	2.60,6	53,0	56,2	54,3	55,1	57,4			345.37.56,34				1.31.5,83	B.
	De Vico's Comet..	1.28,8	22,5	24,0	20,9	20,9	24,0		+1	80.1.23,86				95.56.52,84	G.
Oct. 2	(i) B. 1. 186.....	2.64,6	57,2	60,8	56,8	56,1	59,1		+1	80.12.57,56				96.8.27,26	G.
	Venus S.L.....	1.52,9	49,9	47,9	47,1	48,0	48,9			61.16.49,20	30,020	51,8	53,6	77.11.30,12	B.
	Venus N.L.....	...	...	...	...	...	...	11,472		61.16.23,34				77.11.4,25	B.
	(k) ☉ S.L.....	0.29,1	28,8	23,8	25,9	27,4	25,8	14,969		78.3.48,06	29,468	60,9	63,1	93.59.4,62	B.
	☉ N.L.....	1.51,9	50,2	47,1	48,1	49,8	48,9		+2	77.31.48,85				93.27.3,77	B.
	β Aquarii R.....	0.24,1	23,0	18,3	20,5	22,9	21,9	5,157		143.27.7,51	29,696	56,8	55,2	96.14.48,74	B.
	β Aquarii.....	4.25,4	21,1	20,9	20,0	22,0	23,9			80.19.22,42				96.14.48,65	B.
	ε Pegasi R.....	0.35,0	30,9	29,8	30,0	33,6	32,1	7,356		158.51.31,81				80.49.44,91	B.
	ε Pegasi.....	4.61,1	57,8	56,1	56,0	58,1	57,9		+1½	64.54.58,12				80.49.44,82	B.
	B. xxii. 425.....	3.19,2	13,9	12,9	15,0	15,8		6,590		59.44.30,91	29,714	56,2	54,6	75.39.8,76	B.
	(l) Σ 2905.....	...	...	...	...	...	...			59.43.15,07				75.37.52,89	B.
	(e) * R. 22 ^h . 36 ^m . 2 ^s .	1.29,9	24,9	23,1	23,9	25,5	27,1			8.21.25,80				24.15.5,26	B.
	8 Andromedæ R..	2.23,8	21,9	17,8	19,1	20,4	21,9	0,204		197.50.49,85	29,736	55,8	54,2	41.49.37,50	B.
	8 Andromedæ.....	0.45,1	40,2	37,1	38,1	40,0	40,9			25.55.40,27				41.49.37,60	B.
	B.A.C. 8188 R....	1.24,9	23,8	17,8	20,0	22,0	21,7	7,841		207.22.11,56				32.18.6,21	B.
	B.A.C. 8188.....	4.23,0	19,0	17,0	15,7	17,9	20,0		+1¾	16.24.19,70				32.18.7,45	B.
Oct. 2	H. C. 47310.....	2.23,0	19,1	15,1	16,1	18,4	20,0	13,591		37.41.8,69	29,740	55,6	53,6	53.35.18,25	B.
	β Cassiopeiæ.....	3.28,2	23,3	23,8	22,3	24,9	26,0			15.48.24,92				31.42.12,06	B.
	De Vico's Comet..	1.50,7	48,9	44,8	44,1	46,1	46,9			79.11.47,00	29,744	54,7	51,1	95.7.10,17	G.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10',211, 10',223, 10',231, 10',237, 10',247 at the five wires.
 From Oct. 2 = 10',210, 10',222, 10',230, 10',236, 10',246. ONE REVOLUTION = 20",838. CORRECTION for RUNS = +1",4.
 ZENITH POINT = 21°.53'.15",04. From Oct. 2 = 21°.53'.15",01. ASSUMED CO-LATITUDE = 37°.47'.8",28.

(a) Supposed to have been taken on the micrometer wire as left in the observation of the Moon. (b) Very much fringed, with great motion.
 (c) Extremely unsteady. Times by M, 13^h.3^m.16^s and 13^h.4^m.3^s. M fast on H, 44^s. (d) Indefinite image. (e) Too faint for bisection: the position was estimated by means of the Comb. (f) 'Mag. 8.' (g) 'Magnitudes equal.' (h) At times by M, 1^h.1^m.59^s and 1^h.2^m.57^s. M fast on H, 45^s.3. (i) 'Mag. 7,8.' (k) Clouds continually obscuring. N.L. without dark glass. (l) Observed as single.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.		Observer.
		A	B	C	D	E	F					Int.	Ext.			
		"	"	"	"	"	"	r.		"	Inch.	o	o	"	"	
Oct. 3	8 Andromedæ R.	4. 26,1	22,4	20,0	20,9	23,5	25,1	6,027		197. 50. 50,33	29,764	59,1	55,3	41. 49. 37,01	B.	
	8 Andromedæ.	0. 43,9	39,4	36,2	36,0	39,3	40,6			25. 55. 39,20				41. 49. 36,52	B.	
	B.A.C. 8188 R.	1. 16,0	13,1	8,8	9,9	12,0	11,9	7,333		207. 22. 12,26				32. 18. 5,52	B.	
	B.A.C. 8188	4. 23,2	18,2	17,0	16,5	17,5	20,6			16. 24. 18,58				32. 18. 6,34	B.	
	H. C. 47310.	1. 9,8	4,9	2,0	2,9	5,2	5,9			37. 41. 5,05	29,780	57,9	53,9	53. 35. 14,62	B.	
	(a) β Ceti R.	4. 31,5	26,9	26,8	25,2	27,9	28,7	0,201		130. 52. 56,57	29,792	57,1	53,6	108. 50. 12,56	B.	
	β Ceti.	3. 35,0	29,9	28,1	28,7	29,6	31,0		+2	92. 53. 29,97				108. 50. 9,08	B.	
	φ ³ Ceti.	0. 26,9	22,1	20,1	21,7	22,4	23,1			86. 10. 22,70	29,794	57,0	53,4	102. 6. 15,14	B.	
	B. o. 962.	3. 62,1	57,6	57,2	55,6	58,7	58,3			85. 33. 58,03				101. 29. 47,35	B.	
	η Ceti.	4. 26,3	21,9	20,4	19,8	22,1	23,3			85. 4. 22,05	29,800	56,9	53,1	101. 0. 9,01	B.	
	(b) De Vico's Comet. . .	2. 30,0	24,9	23,4	23,9	25,4	25,9		+2	78. 47. 26,00				94. 42. 47,69	B.	
	(c) Σ 162.	3. 44,8	37,1	37,0	35,8	37,1	40,6			26. 58. 38,53	29,804	55,8	50,8	42. 52. 36,97	B.	
	ι Arietis	1. 54,4	47,0	46,7	45,9	49,1	50,1			57. 1. 48,77				72. 56. 22,86	B.	
Oct. 4	(d) ☉ S.L.	1. 27,9	26,4	23,0	25,1	26,0	24,2	13,817		78. 50. 10,60	29,926	58,9	58,5	94. 45. 31,76	B.	
	☉ N.L.	3. 11,3	8,1	8,0	7,6	8,8	8,1		+1	78. 18. 8,19				94. 13. 27,59	B.	
	61' Cygni R.	4. 21,7	17,2	16,1	16,2	17,2	19,8	7,136		187. 40. 22,25	29,878	55,2	50,0	52. 0. 15,80	B.	
	61' Cygni.	1. 10,2	5,0	4,3	4,1	5,9	6,4		+1½	36. 6. 6,10				52. 0. 14,13	B.	
	(e) α Cephei R.	1. 21,7	16,0	13,4	15,2	16,8	17,2	9,910	+1	211. 36. 22,68	29,876	55,3	49,7	28. 3. 50,63	B.	
	α Cephei.	0. 8,9	3,1	3,1	2,8	3,9	4,7		+3	12. 10. 6,95				28. 3. 50,24	B.	
	(f) ψ Andromedæ R. . .	3. 28,2	23,9	23,5	22,7	24,2	25,2	7,641		195. 14. 18,38	29,836	53,3	49,4	44. 26. 11,70	B.	
	ψ Andromedæ.	2. 16,9	9,8	11,7	9,1	10,1	12,3			28. 32. 11,53				44. 26. 11,59	B.	
Oct. 5	(g) De Vico's Comet. . .	4. 58,3	53,0	52,8	50,8	53,2	54,2		+3	77. 59. 54,15	29,828	55,0	46,4	93. 55. 14,42	B.	
	τ Ceti R.	0. 31,1	26,6	25,7	25,3	26,1	26,8	3,760		132. 57. 41,75	29,834	53,6	46,1	106. 45. 12,50	B.	
	τ Ceti.	3. 51,9	44,9	45,0	42,8	45,3	46,7			90. 48. 45,88				106. 45. 10,11	B.	
Oct. 6	δ Cancri	2. 21,9	17,9	16,2	14,6	16,2	18,1			55. 22. 17,35	29,802	52,2	46,7	71. 16. 49,30	B.	
	(h) S.L.	3. 57,6	53,2	52,2	51,9	51,3	55,7	8,515		62. 59. 29,17	29,804	51,5	47,3	78. 54. 13,38	B.	
	» S.L. . . . .	...	...	...	...	...	...	8,311	+1	62. 59. 30,61				78. 54. 14,82	B.	
	» S.L. . . . .	...	...	...	...	...	...	8,125	+2	62. 59. 31,84				78. 54. 16,05	B.	
	o Leonis	4. 37,2	31,8	32,9	30,7	30,2	34,0			63. 29. 32,55	29,820	50,9	48,6	79. 24. 17,55	B.	
	Venus S.L.	1. 8,2	3,0	2,4	1,6	1,8	3,4			62. 41. 3,33	29,822	50,8	49,6	78. 35. 46,79	B.	
	Venus N.L. . . . .	...	...	...	...	...	...	11,342		62. 40. 40,16				78. 35. 23,61	B.	
	(i) Mercury, centre. . .	3. 53,0	48,3	49,1	46,9	48,1	48,9			73. 23. 48,83	29,836	52,8	53,1	89. 18. 54,67	B.	
Oct. 7	α Aquarii R.	0. 27,1	21,8	22,9	20,2	22,2	23,0	3,633		148. 37. 40,33	29,956	49,6	44,7	91. 4. 1,90	B.	
	α Aquarii.	3. 55,6	49,5	50,4	49,1	49,9	52,2			75. 8. 50,90				91. 4. 3,11	B.	
	(i) B. xxii. 425.	3. 18,2	11,1	12,9	11,0	12,3	14,0	6,574	+1	59. 44. 29,41	29,954	49,0	43,6	75. 39. 8,64	B.	
	Σ 2905. . . . .	...	...	...	...	...	...			59. 43. 13,07				75. 37. 52,27	B.	
	B.A.C. 8188 R.	1. 28,8	24,2	23,2	21,2	23,6	23,7	7,717		207. 22. 16,40	29,950	48,4	42,4	32. 18. 1,20	B.	
	B.A.C. 8188.	3. 31,1	24,7	25,2	23,8	23,9	26,1	7,717		16. 24. 17,97				32. 18. 5,55	B.	
	(l) ι Piscium R.	2. 28,0	22,2	24,1	21,1	23,9	25,9	6,059		154. 28. 50,98				85. 12. 36,74	B.	
	ι Piscium.	2. 45,8	39,8	40,0	39,1	39,1	41,2		+2	69. 17. 40,73				85. 12. 38,43	B.	
	(m) ζ Andromedæ R. . .	0. 30,5	26,9	27,1	24,9	26,0	25,6	7,282		173. 6. 28,25	29,948	45,8	38,5	66. 34. 27,88	B.	
	(n) ζ Andromedæ.	4. 66,9	60,0	62,5	59,4	60,1	62,1			50. 40. 1,83				66. 34. 27,94	B.	
	φ ³ Ceti.	0. 24,8	17,9	19,9	18,2	17,6	19,8		+2½	86. 10. 19,52				102. 6. 16,32	B.	
	B. o. 962.	3. 61,1	54,1	58,5	53,4	55,3	56,1			85. 33. 56,20				101. 29. 49,76	B.	
	(l) 28 Ceti	4. 24,1	17,0	20,7	16,6	17,2	19,4			84. 44. 18,92				100. 40. 8,26	B.	
	(o) De Vico's Comet. . .	4. 25,8	18,2	22,4	17,9	19,1	21,6		+4½	77. 14. 21,54				93. 9. 41,34	B.	
Oct. 8	(p) α Cassiopeiæ R. . .	1. 31,6	27,9	26,9	26,4	25,4	28,8	9,722	+1	205. 21. 38,24	29,546	49,9	47,3	34. 18. 41,53	B.	
	α Cassiopeiæ.	4. 56,1	50,0	52,9	49,0	49,0	51,9		+2½	18. 24. 52,59				34. 18. 42,34	B.	
	(q) ι Piscium. np.	3. 39,8	32,5	33,8	30,9	31,3	35,0		+2	47. 13. 33,98				63. 7. 54,68	B.	
Oct. 9	(f) ☉ N.L.	4. 26,1	22,6	23,3	22,5	20,7	23,9	13,809		80. 13. 8,31	30,184	53,7	53,5	96. 8. 36,01	B.	
	☉ S.L.	0. 15,9	12,7	12,3	10,6	10,5	11,2			80. 45. 12,18				96. 40. 41,86	B.	
Oct. 10	(f) ☉ S.L.	4. 32,1	30,6	29,2	28,0	29,7	30,0	14,500		81. 8. 0,91	29,204	56,8	61,3	97. 3. 27,40	B.	
	☉ N.L.	0. 58,1	57,2	54,0	55,1	54,2	55,1			80. 35. 55,62				96. 31. 20,18	B.	
	33 Piscium.	3. 55,0	52,0	52,0	50,0	50,4	53,0			80. 38. 52,07	29,392	53,0	48,7	96. 34. 19,77	B.	

MICROMETER READING for COINCIDENCE with fixed Wire = 10',210, 10',222, 10',230, 10',236, 10',246 at the five wires. From Oct. 9 = 10',208, 10',220, 10',228, 10',234, 10',244. ONE REVOLUTION = 20'',838. CORRECTION for RUNS from Oct. 3 = -1'',7. From Oct. 10 = 0'',0. ZENITH POINT = 21°. 53'. 15'',01. ASSUMED Co-LATITUDE = 37°. 47'. 8'',28.

(a) Mercury agitated by wind. (b) Very faint, but bisection considered pretty accurate. (c) It appeared closely double, but was observed as single. (d) Limbs uneven and unsteady. (e) Hurriedly. (f) Cloudy. (g) Brighter than on the night of Oct. 3: bisection considered good. (h) Taken hurriedly: the limb was badly defined and very faint. (i) Faint. (k) Indefinite and unsteady: the night was hazy. The direct observation is supposed to have been taken on the micrometer wire. (l) Unsteady. (m) Indefinite. (n) No correction for Runs. (o) Too faint to bear illumination: doubtful observation. (p) Mercury agitated. (q) Faint from cloud.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Oct. 10	(a) 55 Piscium	0.28,5	24,8	22,4	23,1	23,2	26,9	11,070	+ $\frac{3}{4}$	53.30.7,40	29,300	52,8	47,8	69.24.35,98	B.
	γ Cassiopeiæ R....	2.28,9	26,2	25,2	24,7	25,7	26,3	8,782		209.32.56,31	29,304	52,6	47,3	30.7.19,25	B.
	γ Cassiopeiæ	3.37,7	32,8	32,3	31,1	31,0	35,9			14.13.33,47				30.7.19,01	B.
	Polaris R.....	4.20,1	17,0	14,2	15,6	15,1	18,9	11,921		238.8.41,50	29,414	52,5	46,7	1.30.59,47	B.
	Polaris.....	2.52,9	47,1	48,2	47,1	48,0	50,7			345.37.49,00				1.30.59,95	B.
	B. 1. 186.....	2.64,9	60,0	60,9	59,0	60,1	61,9			80.13.1,13				96.8.27,71	B.
	103 Piscium.....	0.7,9	1,9	2,4	0,1	2,0	4,0			58.15.3,05	29,422	52,4	46,5	74.9.38,84	B.
	4 Arietis.....	4.27,9	20,8	22,7	20,1	20,8	24,9			57.54.22,87				73.48.58,13	B.
	Σ 194.....	0.31,2	26,3	25,1	24,0	26,8	29,8	8,300		50.1.7,38				65.55.31,54	B.
	γ Andromedæ R....	4.27,6	24,1	23,9	22,0	24,0	26,0	6,789	+1 $\frac{1}{4}$	191.15.36,22	29,440	52,0	46,6	48.24.57,93	B.
	γ Andromedæ.....	0.55,9	50,9	50,4	49,9	49,9	52,7		+2 $\frac{3}{4}$	32.30.52,46				48.24.56,59	B.
	Venus S.L.....	0.65,9	62,0	61,9	59,9	61,4	62,0			63.46.2,18	29,580	53,1	50,8	79.40.47,03	B.
	Venus N.L.....	...	...	...	...	...	...	11,297		63.45.39,90				79.40.24,74	B.
	α Ursæ Majoris R.	0.32,0	28,8	26,0	26,9	27,6	28,1	10,859	+1	212.15.14,92	29,588	54,0	53,4	27.24.57,89	B.
	α Ursæ Majoris...	1.18,0	13,1	14,6	12,7	13,1	14,9		+1 $\frac{3}{4}$	11.31.15,29				27.24.58,08	B.
	Mercury, centre..	4.15,6	12,7	11,9	11,0	13,6	13,5			73.4.13,05	29,608	56,3	56,9	88.59.16,95	B.
Oct. 11	(c) \odot N.L.....	0.28,1	26,1	23,9	24,7	26,1	25,6	15,661	+2 $\frac{3}{4}$	80.58.32,11	29,616	57,8	59,0	96.53.59,76	B.
	\odot S.L.....	0.41,0	37,9	36,8	36,0	37,2	37,3		+3	81.30.36,73				97.26.6,40	B.
	α Cygni R.....	4.36,1	32,9	33,2	32,1	32,9	35,0	10,089		194.24.36,60	29,700	54,7	50,5	45.15.54,28	B.
	α Cygni.....	1.55,9	49,4	50,1	49,5	50,7	52,9		+1 $\frac{3}{4}$	29.21.51,87				45.15.52,73	B.
	Piazzi O. 208.....	0.29,1	24,0	23,0	22,4	23,9	26,0	15,271		62.8.39,65	29,708	53,0	46,0	78.3.22,33	B.
	γ Cassiopeiæ R....	2.29,9	26,8	25,0	25,3	25,9	28,3	8,739		209.32.57,91				30.7.17,52	B.
	γ Cassiopeiæ	3.39,1	31,7	34,0	32,0	33,4	36,2			14.13.34,40				30.7.19,81	B.
	η Ceti	4.27,2	21,1	23,1	19,9	21,2	24,1			85.4.22,77		52,4		101.0.11,05	B.
Oct. 12	(d) \odot S.L.....	0.34,0	30,8	29,0	29,0	30,2	30,4	16,771		81.53.14,23	29,658	57,7	61,1	97.48.45,09	B.
	\odot N.L.....	1.12,2	9,5	9,0	8,9	9,7	9,8		+2	81.21.9,24				97.16.38,04	B.
Oct. 13	(e) De Vico's Comet..	1.57,0	52,8	57,1	51,6	53,0	54,5		+3	75.6.55,08	29,218	55,0	50,8	91.2.4,30	B.
Oct. 14	(f) Polaris R.....	4.29,7	26,1	23,1	23,1	25,0	27,0	12,150		238.8.45,58	28,956	54,6	48,5	1.30.56,19	B.
	(f) Polaris.....	2.50,2	45,1	46,2	45,1	48,2	48,8			345.37.47,42				1.30.59,17	B.
	(g) Venus N.L.....	2.19,3	15,0	15,1	13,0	14,0	14,9		+3	64.57.14,87	28,960	52,9	51,0	80.52.0,76	B.
Oct. 15	(h) α Cassiopeiæ R....	1.41,4	37,1	36,7	36,1	36,9	39,2	10,079		205.21.41,07	28,908	52,4	46,5	34.18.38,77	B.
	α Cassiopeiæ	4.51,9	45,1	48,2	44,9	45,9	49,1		+2	18.24.48,58				34.18.38,40	B.
	Piazzi O. 208.....	3.44,4	39,3	39,0	37,7	39,2	41,8		+3	62.8.40,66				78.3.21,97	B.
	(i) μ Cassiopeiæ	1.37,5	29,9	31,2	30,1	31,0	33,4		+1 $\frac{1}{2}$	19.56.32,70		52,6	48,5	35.50.24,04	B.
Oct. 16	Venus N.L.....	0.25,6	21,2	21,0	20,1	20,0	21,9		+3	65.35.20,77	29,146	50,7	51,1	81.30.8,18	B.
	Venus S.L.....	...	...	...	...	...	...	9,250		65.35.41,63				81.30.29,05	B.
	Mercury, centre..	4.20,8	16,9	17,5	16,2	16,1	18,2		+2	74.54.17,09	29,178	53,7	53,6	90.49.25,20	B.
Oct. 17	\odot N.L.....	4.27,6	23,9	24,9	23,1	23,9	24,1	16,192	+ $\frac{1}{2}$	83.12.20,48	29,186	54,0	54,8	99.7.56,36	B.
	\odot S.L.....	4.30,0	26,3	27,2	24,2	27,4	26,4		+1 $\frac{1}{4}$	83.44.26,71				99.40.4,88	B.
	8 Andromedæ R....	4.38,8	35,0	34,1	32,9	34,1	37,0	6,431		197.50.54,66	29,386	51,8	47,2	41.49.32,70	B.
	8 Andromedæ	0.40,9	36,1	34,8	35,1	35,2	37,2			25.55.36,57				41.49.33,91	B.
	(k) γ Andromedæ R....	4.29,4	25,1	26,9	24,2	24,8	27,6	6,849		191.15.36,97	29,422	48,2	45,2	48.24.57,19	B.
	γ Andromedæ	0.55,9	49,8	51,0	50,0	48,9	52,4		+1	32.30.51,51				48.24.55,65	B.
	i Persei R.....	2.10,2	6,2	6,1	5,3	5,1	7,1	6,730		204.48.19,70	29,428	48,1	45,1	34.52.0,64	B.
	i Persei.....	3.15,2	8,8	12,1	7,7	8,5	12,1			18.58.10,85				34.52.1,17	B.
Oct. 18	(a) 31 Cassiopeiæ	4.14,7	8,9	11,1	7,4	9,2	11,2			6.9.10,70	29,722	50,0	42,7	22.2.47,40	B.
	B. 1. 186.....	2.62,1	58,0	58,4	56,0	59,1	59,1			80.12.58,98				96.8.27,31	B.
Oct. 19	(l) \odot N.L.....	0.53,4	49,1	50,4	48,9	51,0	49,6		+3	83.55.49,45	29,654	48,6	49,5	99.51.31,32	B.
Oct. 22	ζ Aquarii. sf. R....	1.47,2	44,0	43,7	41,1	44,1	45,0	6,118		148.53.10,28	29,850	48,2	44,6	90.48.30,95	B.
	ζ Aquarii. sf.....	3.24,8	20,8	20,7	18,3	19,1	22,1			74.53.21,18				90.48.32,39	B.
	Venus S.L.....	3.26,8	23,5	23,8	19,8	21,2	24,2		+2	67.38.22,88	29,858	47,0	38,9	83.33.17,23	G.
	Venus N.L.....	...	...	...	...	...	...	11,220	+2	67.38.2,92				83.32.57,26	G.

MICROMETER READING for COINCIDENCE with fixed Wire = 10",208, 10",220, 10",228, 10",234, 10",244 at the five wires. From Oct. 17 = 10",210, 10",222, 10",231, 10",239, 10",249. From Oct. 22 = 10",223, 10",235, 10",244, 10",252, 10",262. ONE REVOLUTION = 20",838. CORRECTION for RUNS = 0",0. From Oct. 13 = +1",1. From Oct. 18 = +2",0. ZENITH POINT = 21°.53'.15",01. ASSUMED CO-LATITUDE 37°.47'.8",28.

(a) Observed as single. (b) Indefinite image by reflection. Times by M, 1^h.3^m.34^s and 1^h.4^m.35^s. M fast on H, 54^s.9. (c) Obscured by passing clouds: limbs very uneven and tremulous. (d) Faint from clouds. (e) Pretty bright, and bisection good. (f) Bad image. Times by M, 1^h.2^m.31^s and 1^h.3^m.27^s. M fast on H, 57^s.1. (g) Clouds passing. Micrometer reading for S.L. omitted. (h) Extremely indefinite. (i) Stars were very badly defined this night. (k) Indistinct. (l) Not visible earlier.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	°	°	°	
Oct. 23	⊙ N.L.....	2.27,1	24,1	23,4	22,7	24,2	23,9	14,144		85.21.3,14	29,846	49,0	50,0	101.16.52,39	G.
	⊙ S.L.....	3.14,9	13,1	13,0	11,3	9,8	12,2			85.53.12,60				101.49.4,60	G.
Oct. 26	α Aquarii R.....	0.23,8	21,1	21,0	18,9	22,0	22,4	3,632		148.37.39,35	29,072	48,9	46,2	91.3.59,90	B.
	α Aquarii.....	3.53,1	49,2	48,9	47,3	49,2	51,5			75.8.50,22				91.4.0,29	B.
	8 Andromedæ R.....	4.27,0	23,2	23,0	20,6	24,0	25,1	5,849		197.50.55,81	29,078	47,1	45,0	41.49.31,10	B.
	8 Andromedæ.....	0.38,9	33,6	33,1	31,1	33,8	35,7			25.55.34,42				41.49.32,15	B.
Oct. 27	B. r. 497.....	0.19,9	15,6	14,8	12,0	16,0	16,2		+1	71.5.15,79	30,228	47,0	40,1	87.0.19,06	B.
	Venus N.L.....	3.60,6	56,1	57,9	53,9	55,9	58,0			69.28.57,43	30,178	44,7	38,0	85.23.57,07	B.
	Venus S.L.....	...	...	...	...	...	...	9,284		69.29.17,43				85.24.17,08	B.
Oct. 28	(a) α Andromedæ R..	4.21,7	18,5	20,1	16,1	19,4	22,0	7,944		177.55.7,96	30,086	45,1	41,5	61.45.41,44	B.
	α Andromedæ.....	1.23,1	19,0	20,1	16,2	19,2	22,0			45.51.20,05				61.45.40,27	B.
	Venus S.L.....	2.23,0	18,4	19,0	16,2	18,0	20,7			69.52.19,43	30,042	45,0	41,4	85.47.19,21	B.
	(a) Venus N.L.....	...	...	...	...	...	...	11,121		69.52.1,15				85.47.0,92	B.
Oct. 31	(b) ⊙ N.L.....	2.59,9	64,1	54,0	60,1	54,9	58,8	11,121		88.2.40,64	29,770	48,7	51,5	103.58.44,49	B.
	α Cassiopeiae R.....	1.15,5	13,1	11,7	11,9	13,6	14,9	8,724		205.21.45,25	29,684	48,0	45,4	34.18.34,07	B.
	α Cassiopeiae.....	4.46,9	43,0	45,0	40,6	43,9	45,7			18.24.44,62				34.18.34,76	B.
	20 Ceti.....	3.53,1	50,0	50,4	48,1	50,3	52,2			76.3.51,03	29,680	47,9	45,2	91.59.5,51	B.
	(c) * R. 0 ^h . 49 ^m . 47 ^s .	3.61,9	59,0	60,2	56,4	59,0	60,4			87.8.59,85				103.4.59,69	B.
	B. o. 962.....	3.60,3	57,0	58,8	55,0	58,7	59,1			85.33.58,52				101.29.49,79	B.
	(d) Polaris R.....	4.29,8	26,1	25,0	23,8	26,5	28,9	11,996		238.8.50,47	29,676	47,8	44,7	1.30.49,52	B.
	(d) Polaris.....	2.43,1	38,1	40,0	38,2	42,0	43,1			345.37.41,04				1.30.51,85	B.
	(c) B. r. 186.....	2.62,9	59,8	59,9	57,8	60,7	60,9			80.13.0,62				96.8.28,84	B.
	B. r. 568.....	4.7,0	3,2	3,8	0,9	4,9	5,5	16,891		69.56.46,09	29,670	47,3	44,6	85.51.44,79	B.
	γ Andromedæ R.....	4.29,0	25,0	26,6	24,0	26,9	29,3	6,757		191.15.39,89	29,658	47,5		48.24.53,95	B.
	γ Andromedæ.....	0.50,8	47,2	46,9	45,9	48,2	48,9			32.30.48,05				48.24.52,71	B.
	(e) Σ 221.....	3.44,6	40,0	39,7	37,9	42,0	42,5			54.28.41,47				70.23.12,52	B.
Nov. 6	(f) ⊙ S.L.....	4.23,3	19,7	21,6	17,9	19,2	21,9	17,580		90.26.47,68	29,184	44,8	46,1	106.23.6,33	B.
	⊙ N.L.....	4.34,6	30,2	32,9	27,9	32,0	32,9			89.54.31,62				105.50.46,43	B.
	Venus S.L.....	4.25,2	23,1	23,0	20,9	21,7	24,9			73.29.23,00	29,350	43,7	42,0	89.24.29,97	B.
	Venus N.L.....	...	...	...	...	...	...	11,119		73.29.4,85				89.24.11,81	B.
Nov. 7	⊙ N.L.....	4.9,9	6,7	9,3	4,8	6,9	8,0	15,646		90.12.14,99	29,356	45,5	48,3	106.8.32,09	B.
	⊙ S.L.....	4.36,2	33,1	34,2	30,1	33,6	34,4			90.44.33,47				106.40.54,53	B.
Nov. 8	⊙ S.L.....	4.28,2	26,0	26,0	23,0	27,0	27,1	17,179		91.2.1,65	29,030	46,9	52,0	106.58.22,16	B.
	⊙ N.L.....	4.47,0	44,9	46,0	42,2	45,8	45,2			90.29.45,03				106.26.1,55	B.
Nov. 9	(g) α Pegasi R.....	2.23,8	21,5	20,9	18,9	22,7	23,7	6,411		164.3.41,81	28,986	46,2	43,6	75.37.25,49	B.
	α Pegasi.....	2.48,8	44,9	44,3	43,0	46,8	47,8			59.42.45,85				75.37.23,97	B.
	(h) Polaris R.....	4.28,5	24,5	24,8	23,1	26,1	28,8	11,866		238.8.51,96	29,006	45,5	42,9	1.30.48,84	B.
	(h) Polaris.....	2.40,2	33,9	37,0	34,7	38,9	39,2			345.37.37,25				1.30.48,87	B.
	B. r. 186.....	3.5,9	1,8	3,0	0,1	3,2	3,8			80.13.2,87				96.8.29,31	B.
	(c) B. r. 576.....	1.62,0	57,9	58,6	55,1	58,9	59,1		+2	67.46.58,60	29,008	45,2	42,5	83.41.51,49	B.
	(i) γ Andromedæ R..	4.23,8	20,0	21,0	18,9	21,4	23,9	6,469	+1½	191.15.40,07	29,010	45,0	42,5	48.24.53,58	B.
	γ Andromedæ.....	0.48,9	44,2	45,0	43,1	46,8	47,2		+3	32.30.47,05				48.24.51,52	B.
Nov. 10	(k) Venus S.L.....	0.13,6	10,0	10,7	8,2	11,0	11,9			75.10.10,90	29,098	44,1	41,8	91.5.21,80	B.
	Venus N.L.....	...	...	...	...	...	...	11,061		75.9.53,96				91.5.4,85	B.
Nov. 13	(l) H. C. 2553.....	1.35,4	31,2	31,0	29,0	32,0	34,0			77.21.32,10	29,766	47,2	45,2	93.16.50,77	B.
	B. r. 736.....	0.25,9	21,0	21,0	18,6	22,2	23,9			67.10.22,10	29,770	47,1	45,8	83.5.14,86	B.
	(m) ν Persei.....	0.54,1	49,0	49,4	47,8	50,2	53,3			32.0.50,63	29,828	46,0	43,5	47.54.54,85	B.
	(n) ε Persei R.....	4.26,8	23,0	23,0	20,0	23,9	26,4	11,406		189.13.59,70				50.26.36,40	B.
	ε Persei.....	2.31,1	27,0	27,0	23,0	26,5	29,8			34.32.27,38				50.26.34,30	B.
	μ Persei R.....	0.12,1	10,1	7,9	7,8	9,5	10,9	7,877		197.40.59,13	29,834	45,8	43,9	41.59.28,07	B.
	μ Persei.....	0.33,0	27,2	28,0	25,1	28,2	31,2			26.5.28,78				41.59.26,80	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',223, 10',235, 10',244, 10',252, 10',262 at the five wires.
 From Nov. 6 = 10',227, 10',239, 10',248, 10',256, 10',266. ONE REVOLUTION = 20',838. CORRECTION for RUNS = + 2'',0.
 From Oct. 26 = + 2'',8. From Nov. 6 = - 0'',9. From Nov. 13 = - 0'',1. ZENITH POINT = 21°.53'.15'',01. From Oct. 26 = 21°.53'.14'',59. ASSUMED CO-LATITUDE = 37°.47'.8'',28.

(a) Hazy. (b) S.L. lost by wrong setting. This limb is supposed to have been taken on the micrometer wire as left in the preceding observation. (c) Faint. (d) At times by M, 1^h. 3^m. 11^s and 1^h. 3^m. 51^s. M fast on 11, 28°. (e) Observed as single: the night was not good. (f) Very cloudy: without the dark glass. (g) Indefinite image. The observer was doubtful whether the instrument was clamped. (h) At times by M, 1^h. 3^m. 19^s and 1^h. 4^m. 16^s. M fast on 11, 47°. (i) Indefinite from haze. (k) Very faint from clouds. (l) Microscopes barely readable on account of dampness. (m) The microscope readings were 1' greater. (n) Bad definition.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.			Observer.
		A	B	C	D	E	F					Int.	Ext.				
		"	"	"	"	"	"				Inch.	"	"	"	"	"	
Nov. 13	♂ Tauri.....	4. 59,1	54,3	56,2	50,9	56,1	58,3			56. 54. 55,80	29,834	45,8	43,9	72. 49. 30,76			B.
	(a) α Camelopardi R.	3. 65,6	61,9	62,8	59,4	62,3	65,4	9,594		215. 44. 16,50	29,846	45,7	44,0	23. 55. 51,84			B.
	(b) α Camelopardi....	1. 63,8	57,3	61,0	56,7	59,7	61,8	9,594		8. 2. 13,65				23. 55. 52,81			B.
Nov. 15	(a) Venus S.L.	3. 17,1	12,9	15,9	10,7	14,0	15,2			77. 18. 14,28	30,166	49,0	46,4	93. 13. 33,70			B.
	Venus N.L. ....	...	...	...	...	...	...	10,970		77. 17. 59,25				93. 13. 18,66			B.
	(c) Polaris SP. R.	1. 22,1	17,4	17,5	15,2	18,1	21,9	13,081		241. 10. 19,69				-1. 30. 45,25			B.
	Polaris SP.	1. 10,8	5,1	7,6	5,9	7,0	9,2			342. 36. 7,50				-1. 30. 47,24			B.
Nov. 20	(d) ☉ S.L.	0. 15,1	12,7	12,7	13,2	12,8	12,1	18,225	+3	94. 7. 26,53	30,066	50,6	51,6	110. 4. 20,54			B.
	☉ N.L.	0. 11,9	8,6	8,9	7,1	8,1	8,1		+4½	93. 35. 6,97				109. 31. 55,43			B.
	α Andromedæ R.	4. 26,3	24,3	25,1	22,1	24,9	27,3	8,164		177. 55. 9,33	30,152	50,6	48,7	61. 45. 39,74			B.
	α Andromedæ....	1. 20,1	16,1	16,8	14,6	16,9	20,0		+1½	45. 51. 17,76				61. 45. 37,65			B.
	α Cassiopeiæ R.	1. 40,2	37,7	36,9	36,2	37,4	39,0	9,738		205. 21. 49,09	30,158	50,0	48,0	34. 18. 30,19			B.
	α Cassiopeiæ....	4. 40,5	37,9	39,8	35,2	37,8	40,1		+1	18. 24. 39,34				34. 18. 29,44			B.
	(e) S.L.	0. 56,0	53,8	53,4	52,1	54,2	53,9	7,710	-2	65. 51. 41,05				81. 46. 31,64			B.
	S.L. ....	...	...	...	...	...	...	7,800	-1	65. 51. 42,36				81. 46. 32,95			B.
	S.L. ....	...	...	...	...	...	...	7,951		65. 51. 42,23				81. 46. 32,82			B.
	S.L. ....	...	...	...	...	...	...	8,107	+1	65. 51. 42,04				81. 46. 32,63			B.
	S.L. ....	...	...	...	...	...	...	8,264	+2	65. 51. 41,86				81. 46. 32,45			B.
	* R. 0 ^h . 49 ^m . 47 ^s .	3. 63,7	60,1	63,2	58,7	61,3	62,0			87. 9. 2,00				103. 5. 3,13			B.
	ε Piscium.....	1. 44,6	41,1	40,8	37,9	41,3	41,5			67. 1. 41,42	30,162	49,8	47,7	82. 56. 34,42			B.
	(f) Polaris R.	4. 27,8	25,1	24,0	22,8	25,0	27,8	11,791		238. 8. 54,15				1. 30. 45,41			B.
	Polaris.....	2. 36,5	31,9	33,2	31,4	33,8	30,5			345. 37. 34,39				1. 30. 44,77			B.
	η Piscium R.	2. 27,5	26,0	27,1	25,1	27,4	29,2	5,878		164. 13. 58,77	30,164	49,4	47,3	75. 27. 9,70			B.
	η Piscium.....	2. 30,1	26,7	26,9	24,1	28,0	28,8		+1½	59. 32. 27,82				75. 27. 7,11			B.
	(g) Polaris SP. R.	1. 16,2	11,9	12,3	10,1	11,5	14,0	12,881		241. 10. 18,30	30,270	45,7	41,2	-1. 30. 44,56			B.
	Polaris SP.	1. 14,4	8,6	12,6	8,5	9,5	11,1			342. 36. 10,90				-1. 30. 44,54			B.
	Venus S.L.	2. 21,2	17,8	18,9	14,9	17,0	18,8			79. 27. 18,38				95. 22. 46,38			B.
	Venus N.L. ....	...	...	...	...	...	...	11,069		79. 27. 1,63				95. 22. 29,61			B.
	☉ N.L.	1. 28,9	23,2	25,0	25,0	23,7	26,9	19,059		93. 48. 22,37	30,276	46,4	45,6	109. 45. 16,52			B.
	☉ S.L.	0. 44,0	38,9	40,0	39,6	38,7	40,6		+1	94. 20. 40,17				110. 17. 40,10			B.
	(h) 8 Andromedæ R.	4. 27,2	23,2	25,1	21,2	22,0	26,0	5,731		197. 50. 59,15	30,240	41,7	33,7	41. 49. 28,02			B.
	8 Andromedæ....	0. 35,0	30,1	30,0	26,9	29,1	30,9			25. 55. 30,40				41. 49. 28,39			B.
	(i) ε Piscium.....	1. 43,4	37,1	40,4	35,8	37,0	40,3			67. 1. 39,20	30,236	39,9	32,2	82. 56. 34,29			B.
	S.L.	0. 16,4	11,8	14,6	10,2	11,2	14,7	5,270	-2	61. 46. 51,77	30,234	58,8	32,1	77. 41. 36,56			B.
	S.L. ....	...	...	...	...	...	...	5,406	-1	61. 46. 51,75				77. 41. 36,54			B.
	S.L. ....	...	...	...	...	...	...	5,467		61. 46. 53,17				77. 41. 37,96			B.
	S.L. ....	...	...	...	...	...	...	5,661	+1	61. 46. 51,85				77. 41. 36,64			B.
	S.L. ....	...	...	...	...	...	...	5,854	+2	61. 46. 50,61				77. 41. 35,40			B.
	(k) β Arietis.....	2. 28,0	23,9	25,8	21,0	22,0	26,2			54. 2. 24,78	30,232	38,5	32,0	69. 56. 56,92			B.
Nov. 23	20 Ceti.....	3. 51,1	47,6	49,6	46,1	47,9	50,0		+4½	76. 3. 49,07	30,114	44,5	39,6	91. 59. 5,68			B.
	(l) Polaris R.	4. 22,1	19,0	19,6	17,5	18,1	22,3	11,440		238. 8. 55,31				1. 30. 43,58			B.
	Polaris.....	2. 36,2	30,8	34,3	31,6	33,6	35,9			345. 37. 34,24				1. 30. 43,95			B.
	(k) ξ Andromedæ R.	2. 30,0	27,1	28,2	25,9	27,1	29,5	6,888		194. 23. 38,64		43,8	38,0	45. 16. 52,15			B.
	ξ Andromedæ....	2. 51,9	47,9	50,0	45,6	48,4	50,4			29. 22. 49,38				45. 16. 50,99			B.
	(m) 103 Piscium....	4. 61,8	57,9	60,9	56,0	59,3	59,4			58. 14. 59,22	30,116	43,4	37,5	74. 9. 37,24			B.
	(n) 4 Arietis.....	4. 22,9	17,1	20,7	15,8	17,8	20,7			57. 54. 19,70				73. 48. 57,17			B.
	Σ 179. np.....	2. 19,1	12,9	15,1	11,8	13,7	16,3			37. 32. 15,10	30,144	43,0	37,6	53. 26. 25,67			B.
	(k) α Arietis R.	3. 29,9	27,4	28,7	25,6	28,4	29,1	6,721		172. 24. 42,46				67. 16. 14,45			B.
	α Arietis.....	1. 48,7	43,5	45,7	41,8	43,9	46,8		+1	51. 24. 45,34				67. 16. 13,07			B.
	i Persei R.	2. 25,4	22,8	22,8	20,9	24,0	25,7	7,178		204. 48. 28,23	30,108	42,0	37,7	34. 51. 51,57			B.
	i Persei.....	2. 64,1	59,6	63,5	57,2	61,2	63,9			18. 58. 1,95				34. 51. 52,57			B.
	π Arietis.....	1. 22,0	16,9	19,2	14,4	18,8	19,7			57. 16. 18,67				73. 10. 55,10			B.
	ε Arietis.....	2. 24,9	19,8	22,4	17,9	21,2	23,7			53. 22. 21,93	30,106	41,5	36,3	69. 16. 52,59			B.
	(o) S.L.	3. 10,0	5,0	7,9	2,2	4,9	7,1	8,147	-2	55. 38. 47,36	30,096	40,7	35,4	71. 33. 21,45			B.
	S.L. ....	...	...	...	...	...	...	8,169	-1	55. 38. 48,63				71. 33. 22,72			B.
	S.L. ....	...	...	...	...	...	...	8,310		55. 38. 47,30				71. 33. 21,39			B.
	S.L. ....	...	...	...	...	...	...	8,399	+1	55. 38. 47,16				71. 33. 21,25			B.
	S.L. ....	...	...	...	...	...	...	8,500	+2	55. 38. 46,85				71. 33. 20,94			B.

MICROMETER READING FOR COINCIDENCE with fixed Wire = 10', 227, 10', 239, 10', 248, 10', 256, 10', 266 at the five wires. From Nov. 15 = 10', 228, 10', 240, 10', 249, 10', 257, 10', 267. From Nov. 20 = 10', 247, 10', 261, 10', 265, 10', 268, 10', 270. ONE REVOLUTION = 20'', 838. CORRECTION for RUNS = -0'', 1. From Nov. 20 = +3'', 7. ZENITH POINT = 21° 53' 14'', 59. ASSUMED CO-LATITUDE = 37° 47' 8'', 28.

(a) Faint from clouds. (b) Doubtful observation: supposed to have been taken on the micrometer wire. (c) Unsteady. Times by M, 13^h. 5^m. 27^s and 13^h. 6^m. 21^s. M fast on H, 61^s. (d) Taken hurriedly. (e) Very uneven with considerable waving. The micrometer readings were less by 1'. (f) At times by M, 1^h. 5^m. 31^s and 1^h. 6^m. 56^s. M fast on H, 72^s. (g) Indefinite and unsteady. Times by M, 13^h. 5^m. 3^s and 13^h. 5^m. 47^s. M fast on H, 72^s. (h) Very indistinct: foggy atmosphere. (i) Much motion and indistinctness. (k) Bad definition. (l) Extremely indistinct. Times by M, 1^h. 1^m. 58^s and 1^h. 3^m. 10^s. M fast on H, 78^s. (m) No correction for Runs. (n) Seemed double: the night however was not good. (o) Very uneven, with great motion.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle Reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.			Observer.
		A	B	C	D	E	F					Int.	Ext.	°	'	"	
Nov. 25	(a) Polaris SP. R.	1. 30,1	25,8	26,2	24,6	26,0	30,4	13,690		241. 10. 16,01	30,166	39,7	31,0	-1. 30. 44,22			B.
	Polaris SP.	1. 16,0	10,9	16,2	10,4	12,5	14,2			342. 36. 13,51				-1. 30. 41,74			B.
	(b) Venus N.L.	0. 31,0	26,1	30,5	25,3	27,9	30,4			81. 35. 28,60	30,168	38,4	31,6	97. 31. 7,61			B.
	Venus S.L. ....	...	...	...	...	...	...	9,459		81. 35. 45,40				97. 31. 24,43			B.
Nov. 26	☉ S.L.	4. 26,1	23,4	27,0	21,8	24,0	25,8	19,071	+ $\frac{3}{4}$	95. 21. 21,45	30,200	40,1	40,4	111. 18. 35,96			B.
	☉ N.L.	3. 59,8	56,4	60,0	56,3	58,0	57,7		+1 $\frac{1}{2}$	94. 48. 58,19				110. 46. 6,18			B.
	α Lyræ R.	3. 33,9	31,9	34,1	30,6	33,4	35,4	7,845		188. 19. 23,86	30,212	44,0	42,3	51. 21. 12,38			B.
	α Lyræ.	1. 63,5	61,1	63,0	59,2	62,1	62,7			35. 27. 2,18				51. 21. 11,38			B.
	i Persei R.	2. 27,5	25,2	26,0	23,0	24,2	27,9	7,291		204. 48. 27,67	30,254	37,5	31,4	34. 51. 51,00			B.
	i Persei.	2. 62,6	58,7	63,3	56,1	59,9	60,9			18. 58. 0,62				34. 51. 52,25			B.
	29 Arietis.	4. 30,2	24,6	29,1	23,0	26,8	29,8			59. 44. 27,80				75. 39. 10,18			B.
	30 Arietis. sf.	2. 17,3	12,8	15,9	10,8	14,1	16,2		+2 $\frac{1}{2}$	50. 7. 15,22	30,256	37,6	31,4	66. 1. 42,89			B.
	(c) 38 Arietis.	2. 45,0	41,1	43,1	38,8	41,8	44,9			62. 17. 42,78				78. 12. 29,70			B.
	ψ Persei.	0. 41,9	34,3	40,0	33,9	36,2	39,8			26. 25. 37,77	30,250	36,7	30,5	42. 19. 37,41			B.
	(d) Capella R.	0. 26,9	24,9	26,0	24,1	23,2	26,7			195. 30. 25,35	30,256	35,8	30,4	44. 10. 3,32			B.
	Capella.	0. 65,8	59,0	64,3	58,0	60,0	63,4			28. 16. 1,87				44. 10. 3,50			B.
	(e) β Tauri.	2. 31,4	26,0	28,6	22,4	24,9	30,1			45. 37. 27,53				61. 31. 49,30			B.
	ζ Tauri.	2. 60,8	56,2	60,7	53,1	57,8	60,7			53. 2. 58,58	30,258	35,9	30,4	68. 57. 30,49			B.
	(f) N.L.	3. 64,2	57,4	62,9	55,7	59,1	62,9	9,579	-2	52. 54. 15,99	30,262	36,0		68. 48. 47,69			B.
	) N.L. ....	...	...	...	...	...	...	9,529	-1	52. 54. 16,56				68. 48. 48,26			B.
	) N.L. ....	...	...	...	...	...	...	9,524		52. 54. 16,09				68. 48. 47,79			B.
	) N.L. ....	...	...	...	...	...	...	9,523	+1	52. 54. 15,63				68. 48. 47,33			B.
	) N.L. ....	...	...	...	...	...	...	9,510	+2	52. 54. 15,51				68. 48. 47,21			B.
	μ Geminorum.	0. 25,4	18,0	22,9	17,7	20,0	24,0			51. 30. 21,37				67. 24. 51,06			B.
	γ Geminorum.	3. 54,5	48,0	54,0	45,9	49,9	53,1			57. 33. 51,38	30,260		30,3	73. 28. 30,25			B.
	Venus S.L.	1. 17,1	13,0	16,4	12,6	14,0	16,1			82. 1. 15,02	30,258	37,3	31,5	97. 56. 56,17			B.
	(g) Venus N.L. ....	...	...	...	...	...	...	11,000		82. 0. 59,47				97. 56. 40,60			B.
Nov. 27	☉ N.L.	3. 27,9	25,6	28,2	23,6	25,5	27,9	20,456		94. 59. 54,26	30,256	40,1	38,6	110. 57. 5,52			B.
	☉ S.L.	2. 18,9	16,6	18,8	14,0	16,5	17,8			95. 32. 17,37				111. 29. 35,32			B.
	Mercury, centre. .	2. 28,0	26,1	28,1	23,8	26,1	27,0		+2 $\frac{1}{2}$	97. 42. 25,84	30,254	41,0	40,0	113. 40. 14,76			B.
	(h) α Cassiopeiæ R. .	1. 44,9	41,6	42,7	40,9	42,6	45,2	9,964		205. 21. 49,23	30,196	38,7	32,6	34. 18. 28,86			B.
	α Cassiopeiæ.	4. 40,0	34,9	40,7	33,1	37,4	39,9			18. 24. 38,20				34. 18. 29,25			B.
	31 Cassiopeiæ.	3. 60,7	56,0	60,9	53,7	58,0	60,2			6. 8. 58,72			31,9	22. 2. 36,26			B.
	θ Ceti R.	1. 34,3	31,0	32,9	30,1	32,1	34,1	5,570		140. 43. 10,20			31,8	98. 59. 2,25			B.
	θ Ceti.	3. 18,0	13,9	17,9	14,2	15,6	18,7			83. 3. 16,77				98. 59. 2,18			B.
	103 Piscium.	0. 33,2	29,2	30,6	27,1	30,9	33,1	11,830	+1 $\frac{1}{4}$	58. 14. 57,99				74. 9. 37,49			B.
	(i) 105 Piscium.	3. 43,9	38,2	41,0	35,9	40,1	42,7	11,830		58. 28. 7,88	30,186		31,6	74. 22. 47,99			B.
	4 Arietis.	4. 21,6	15,0	20,0	14,1	17,1	20,8			57. 54. 18,60				73. 48. 57,79			B.
	B.A.C. 549. ....	...	...	...	...	...	...	21,322		57. 50. 27,96				73. 45. 7,05			B.
	Σ 194.	0. 62,6	57,0	60,2	55,1	60,8	61,7			50. 0. 59,68			38,4	65. 55. 27,09			B.
	B.A.C. 632.	4. 55,1	50,1	53,9	47,9	52,2	54,9			56. 34. 52,92				72. 29. 29,94			B.
	δ Persei R.	2. 27,8	23,9	26,1	22,6	25,1	28,1	9,466		196. 57. 42,31	30,162	37,4	31,4	42. 42. 44,76			B.
	δ Persei.	3. 47,1	43,0	46,0	40,1	44,1	46,1			26. 48. 44,83				42. 42. 44,86			B.
Dec. 3	i Persei R.	2. 23,2	19,1	20,0	17,7	19,9	23,1	6,980		204. 48. 28,99	30,126	35,8	34,5	34. 51. 49,72			B.
	i Persei.	2. 60,0	56,4	59,9	53,2	58,2	59,1		+1	18. 57. 58,36				34. 51. 50,03			B.
	29 Arietis.	4. 30,9	26,8	29,8	23,4	29,0	30,7			59. 44. 28,97				75. 39. 10,84			B.
	μ Arietis.	4. 29,2	25,0	27,1	22,0	27,2	28,5			54. 44. 27,02	30,128	36,1	34,4	70. 39. 0,94			B.
	39 Arietis.	4. 33,8	27,9	32,9	25,5	30,9	33,4			45. 29. 31,27				61. 23. 52,54			B.
	(k) α Persei R.	3. 30,5	26,7	28,4	24,5	29,0	30,5	9,302		198. 58. 48,50	30,130	35,7	33,8	40. 41. 36,38			B.
	α Persei.	2. 42,1	36,2	40,7	34,1	38,1	40,2		+1	24. 47. 39,04				40. 41. 36,88			B.
	ψ Persei.	0. 33,0	28,1	31,0	26,9	29,7	32,6	9,949		26. 25. 36,63				42. 19. 36,21			B.
	ν Persei.	0. 51,0	45,9	49,9	44,8	47,2	50,2			32. 0. 48,27	30,138	35,7	34,4	47. 54. 53,87			B.
	(l) ε Persei.	2. 28,0	22,3	24,5	20,2	22,6	26,6			34. 32. 24,32	30,140	35,7	34,7	50. 26. 33,70			B.
Dec. 4	(m) ☉ S.L.	1. 22,8	18,0	21,7	18,2	20,4	22,2	20,892		96. 37. 38,96	30,216	36,8	35,4	112. 35. 12,96			B.
	☉ N.L.	0. 14,5	12,5	13,5	9,8	13,0	13,1			96. 5. 12,73				112. 2. 39,08			B.
	α Lyræ R.	3. 30,9	27,4	31,8	27,1	30,1	33,1	7,760		188. 19. 22,14	30,184	36,6	35,5	51. 21. 14,29			B.
	α Lyræ.	2. 7,8	1,9	6,5	0,9	4,2	5,9			35. 27. 4,52				51. 21. 13,91			B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10",247, 10",261, 10",265, 10",268, 10",270 at the five wires. From Nov. 26 = 10",236, 10",250, 10",254, 10",257, 10",259. From Dec. 4 = 10",241, 10",255, 10",259, 10",262, 10",264. ONE REVOLUTION = 20",838. CORRECTION for RUNS = + 3",7. From Nov. 27 = + 3",5. From Dec. 4 = - 0",2. ZENITH POINT from Nov. 25 = 21°. 53'. 13",52. ASSUMED CO-LATITUDE = 37°. 47'. 8",28.

(a) Unsteady. Times by M, 13^h. 4^m. 39^s and 13^h. 5^m. 36^s. M fast on H, 85°. (b) Unsteady and badly defined. (c) Indefinite. (d) Accidentally on the fixed wire, but not perfectly bisected. (e) Too much wind for reflection observations. (f) Limb not full. (g) Cloudy. (h) Doubtful from great unsteadiness. (i) Unintentionally on the micrometer wire. (k) Clouds passing. (l) Clouds. (m) Clouds passing and great waving of the limbs.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Dec. 4	Aldebaran R.....	1.48,5	44,9	48,7	44,0	47,5	49,1	7,795		165.52.38,45	30,136	35,6	30,5	73.48.27,80	B.
	Aldebaran.....	3.49,2	44,1	48,7	41,1	46,0	48,0			57.53.46,15				73.48.25,36	B.
	α Aurigæ.....	0.54,9	48,1	52,9	46,6	51,0	52,0			41.10.50,92	30,134	35,4	30,2	57.5.7,11	B.
	Σ 652.....	0.55,1	51,6	56,0	50,1	53,8	53,7	14,950		73.14.15,63	30,132	35,2	29,8	89.9.26,87	B.
	(a) Rigel R.....	2.17,7	14,1	17,2	13,0	16,1	17,0	5,278		141.18.59,62				98.23.10,41	B.
	Rigel.....	2.25,9	20,0	24,4	18,5	23,1	23,9		+2	82.27.22,53				98.23.5,52	B.
	(b) * R. 5 ^h . 15 ^m . 21 ^s	4.46,0	40,4	44,8	37,0	43,0	44,1			69.34.42,52				85.29.44,51	B.
	(c) B. v. 623.....	0.55,9	51,6	54,2	49,0	52,7	54,7			68.0.53,02	30,122		29,7	83.55.51,43	B.
	α Orionis R.....	2.28,0	24,6	27,8	21,9	25,9	28,2	6,678		157.3.40,67	30,120	34,5		82.37.41,95	B.
	α Orionis.....	2.47,9	42,1	46,0	39,8	44,7	46,4		+1	66.42.44,49				82.37.40,07	B.
	δ S.L.....	4.32,6	26,6	30,6	25,4	28,4	31,3	5,718	-1	83.31.7,10	30,074	34,1	26,0	99.26.55,60	B.
	δ S.L.....	...	...	...	...	...	...	5,644		83.31.5,28				99.26.53,78	B.
	δ S.L.....	...	...	...	...	...	...	5,375	+1	83.31.7,49				99.26.55,99	B.
	δ S.L.....	...	...	...	...	...	...	5,178	+2	83.31.8,12				99.26.56,62	B.
	θ Virginis.....	1.67,6	59,8	66,3	59,6	62,7	64,9			78.47.3,47	30,072	33,2	25,8	94.42.32,58	B.
	(d) Venus N.L.....	0.12,1	8,4	12,4	7,6	7,7	10,3		+3	85.20.8,71	30,074	31,7	28,1	101.16.5,75	B.
	Venus S.L.....	...	...	...	...	...	...	9,420	+3	85.20.26,40				101.16.23,46	B.
Dec. 5	(e) ☉ N.L.....	0.38,8	37,8	37,5	35,6	37,9	38,7	18,169		96.12.52,89	30,060	35,0	34,5	112.10.20,30	B.
	☉ S.L.....	0.15,1	12,2	16,1	12,0	14,8	15,4			96.45.14,27				112.42.49,42	B.
	β Aquarii R.....	2.30,0	26,8	29,2	25,8	28,6	31,1	11,218		143.27.8,59	30,048	35,1	32,2	96.14.51,87	B.
	β Aquarii.....	4.20,7	17,6	21,0	16,0	18,8	21,9			80.19.19,30				96.14.52,72	B.
	α Aquarii R.....	2.28,0	23,4	26,9	22,1	26,2	28,0	9,676		148.37.37,90		34,8	31,0	91.4.5,38	B.
	α Aquarii.....	3.51,2	47,6	50,6	45,9	49,1	52,1			75.8.49,38				91.4.5,62	B.
	ε Cephei R.....	0.25,1	20,1	22,0	18,8	22,0	23,1	5,497		205.57.1,08				33.43.16,39	B.
	ε Cephei.....	4.29,0	23,9	28,3	22,0	26,9	28,2		+1	17.49.26,57				33.43.17,00	B.
	105 Piscium.....	3.10,9	5,4	10,0	3,0	7,5	8,9			58.28.7,60	30,072	32,9	26,5	74.22.48,04	B.
	B.A.C. 549.....	0.32,0	26,2	29,9	23,3	28,2	29,4			57.50.28,17				73.45.7,57	B.
	(f) Σ 179. np.....	2.17,8	11,1	13,9	9,1	12,2	15,7			37.32.13,28	30,074	32,8	26,3	53.26.23,67	B.
	(g) Σ 194.....	0.62,9	58,0	62,1	54,9	61,2	61,0			50.1.0,02				65.55.27,71	B.
	(h) B.A.C. 632.....	4.55,3	49,8	54,1	46,9	52,5	54,1		+ $\frac{3}{4}$	56.34.52,10				72.29.29,49	B.
	(i) S.L.....	2.15,1	10,1	16,1	9,9	11,9	14,5	2,780	+1	88.19.45,63	30,150	30,0	20,8	104.16.2,92	B.
	δ S.L.....	...	...	...	...	...	...	2,499	+2	88.19.48,25				104.16.5,54	B.
	Venus N.L.....	4.13,4	10,0	15,0	9,4	10,0	15,0			86.44.12,10	30,160	28,9	23,0	102.40.18,73	B.
	Venus S.L.....	...	...	...	...	...	...	9,481		86.44.28,32				102.40.34,98	B.
Dec. 6	☉ S.L.....	1.29,8	26,2	30,0	25,1	28,2	30,2	21,961		96.52.24,38	30,164	31,8	28,3	112.50.5,08	B.
	(k) ☉ N.L.....	4.62,9	60,9	62,6	59,0	60,9	61,0			96.20.1,22				112.17.33,82	B.
	Mercury, centre...	4.36,0	32,9	37,4	30,9	34,0	35,5			99.29.34,42		32,6	30,2	115.28.1,86	B.
	(l) B. 1. 988.....	0.45,7	43,6	45,5	40,1	43,9	46,0		+4 $\frac{1}{2}$	63.10.44,72	30,200	29,7	26,1	79.5.33,79	B.
	i Persei R.....	2.31,7	28,1	30,6	26,9	28,8	32,2	7,409		204.48.29,09				34.51.49,55	B.
	i Persei.....	2.61,1	56,9	62,0	54,0	58,0	60,0			18.57.58,65				34.51.50,25	B.
	30 Arietis. sf.....	2.16,0	12,5	15,5	9,6	14,6	15,8			50.7.13,98		29,9	26,2	66.1.41,96	B.
	38 Arietis.....	2.45,1	42,2	44,9	38,1	43,2	45,0			62.17.43,07				78.12.30,47	B.
Dec. 7	H. C. 4925.....	1.48,2	43,2	47,9	41,1	46,4	47,0			58.1.45,62	30,278	31,1	27,0	73.56.25,59	B.
	(h) α Persei R.....	3.35,1	32,0	34,9	29,9	34,0	36,1	9,544		198.58.48,55	30,288	30,8	26,4	40.41.36,40	B.
	α Persei.....	2.40,4	35,9	40,3	33,8	38,1	39,9		+1	24.47.38,22				40.41.36,13	B.
	(m) ε Eridani.....	2.64,9	61,9	66,1	59,0	63,7	64,0	9,544	+1 $\frac{1}{2}$	84.3.18,09	30,292			99.59.10,00	B.
	(n) ε Persei.....	2.28,1	23,0	26,0	18,8	24,8	25,9			34.32.24,42		30,6	25,2	50.26.33,14	B.
	ω ² Tauri.....	3.54,8	50,0	54,9	46,0	52,9	54,0			53.53.52,07		30,0	24,4	69.48.25,77	B.
	δ ¹ Tauri.....	4.54,9	50,0	55,4	45,9	53,5	54,5			56.54.52,33				72.49.30,74	B.
	Aldebaran R.....	1.39,4	37,2	40,8	35,1	40,7	40,7	7,384		165.52.38,88	30,290	29,8	24,1	73.48.28,21	B.
	Aldebaran.....	3.48,0	43,1	48,8	40,1	45,8	47,1		+1	57.53.45,49				73.48.25,54	B.
	(d) Rigel R.....	2.31,2	28,1	30,3	25,9	29,7	31,1	5,886	+2 $\frac{1}{4}$	141.19.0,79	30,288	29,9	23,9	98.23.11,18	B.
Dec. 9	Rigel.....	2.24,4	20,1	24,1	17,9	22,8	23,1		+4 $\frac{1}{2}$	82.27.21,60				98.23.6,53	B.
	(o) α Cassiopeiae R....	1.35,7	34,6	35,7	31,2	37,9	37,8	9,552		205.21.50,53	30,174	36,6	35,9	34.18.27,59	B.
	α Cassiopeiae.....	4.37,1	34,8	37,5	29,3	37,4	38,2			18.24.36,48				34.18.27,56	B.
	φ ⁴ Ceti.....	1.64,1	61,0	64,6	59,1	63,6	63,1			86.17.2,92	30,178	36,5	35,1	102.13.3,69	B.
	η Ceti.....	4.24,3	22,2	24,8	18,1	23,0	25,0			85.4.23,63			35,0	101.0.17,94	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10'',241, 10'',255, 10'',259, 10'',262, 10'',264 at the five wires.
 From Dec. 19 = 10'',243, 10'',257, 10'',261, 10'',264, 10'',266. ONE REVOLUTION = 20'',838. CORRECTION for RUNS = - 0'',2.
 From Dec. 19 = + 5'',0. ZENITH POINT = 21°. 53'. 13'',52. ASSUMED CO-LATITUDE = 37°. 47'. 8'',28.

(a) Bad definition. (b) No other near. (c) Accompanied by a fainter. (d) Observed hurriedly. (e) Great motion. (f) The observer having bisected the interval between the stars, the correction - 1'',63, deduced from Struve's measures, has been applied. (g) Observed as single. (h) Unsteady and indefinite. (i) Extremely faint from haze. The micrometer readings have been diminished by 1''. (k) No correction for runs. (l) Doubtful bisection: object-glass misty and star very faint. (m) Supposed to be taken on the micrometer wire. (n) Bad night for observing. (o) Clouds passing.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		" "	" "	" "	" "	" "	" "					" "	" "		
Dec. 19	(a) 37 Ceti.....	4.42,1	40,0	43,2	36,4	42,1	42,8		+1	82.49.41,86	30,178	36,5	35,0	98.45.25,45	B.
	π Piscium.....	4.19,2	16,1	18,0	11,8	17,7	21,0			62.44.18,02		36,0		78.39.5,22	B.
	) S.L.....	3.46,5	41,8	46,0	38,5	45,0	45,9	11,384	-2	59.23.16,31	30,184	35,8	34,3	75.17.57,69	B.
	) S.L.....	...	...	...	...	...	...	11,481	-1	59.23.16,77				75.17.58,15	B.
	) S.L.....	...	...	...	...	...	...	11,569		59.23.17,31				75.17.58,69	B.
	) S.L.....	...	...	...	...	...	...	11,698	+1	59.23.17,05				75.17.58,43	B.
	) S.L.....	...	...	...	...	...	...	11,847	+2	59.23.16,45				75.17.57,83	B.
	27 Arietis.....	4.22,9	17,8	21,7	14,0	20,7	23,1			57.4.20,75	30,192	35,7	34,1	72.58.58,38	B.
	π Arietis.....	1.20,8	15,8	18,8	11,1	18,6	20,1			57.16.17,75	30,200		34,5	73.10.55,67	B.
	α Ceti R.....	0.25,0	23,8	26,9	20,9	26,0	28,1	10,811		153.10.13,72	30,202	35,6	33,9	86.31.17,33	B.
	α Ceti.....	1.13,8	11,0	14,6	6,8	12,1	14,1		+1½	70.36.12,29				86.31.16,30	B.
	α Persei R.....	3.33,5	32,1	32,0	27,9	34,0	35,3	9,491		198.58.40,10	30,212		33,6	40.41.35,79	B.
	α Persei.....	2.38,3	34,1	38,2	38,2	37,1	38,0			24.47.36,42				40.41.34,27	B.
	(b) Venus N.L.....	2.14,8	10,1	14,8	7,1	12,7	13,5			90.52.12,53	30,274	34,5	31,6	106.48.45,70	B.
	Venus S.L.....	...	...	...	...	...	...	9,547		90.52.27,41				106.49.0,61	B.
Dec. 20	(c) ☉ S.L.....	2.25,2	23,6	26,2	20,9	23,7	25,9	15,178		97.45.42,19	30,288	35,7	35,3	113.43.34,67	B.
	☉ N.L.....	3.17,2	15,7	18,6	13,8	15,9	18,0			97.13.17,08				113.11.0,72	B.
	Mercury, centre...	2.7,0	5,1	9,0	1,9	5,9	5,9			98.27.6,15	30,280	36,1	35,5	114.25.10,70	B.
	α Cygni R.....	4.26,8	24,2	27,9	21,4	24,1	28,2	10,072		194.24.30,11	30,278	35,9	34,4	45.15.59,69	B.
	α Cygni.....	1.55,8	52,1	56,1	50,1	54,1	55,8			29.21.54,32				45.15.57,08	B.
	1.29,1	26,9	27,0	26,1	28,4	29,5		10,550		211.36.22,04	30,276	35,7	33,5	28.3.49,30	B.
	(d) α Cephei.....	4.66,1	63,7	67,0	59,6	65,1	64,8			12.10.4,38				28.3.40,68	B.
	27 Arietis.....	4.22,0	17,9	21,1	13,1	19,2	21,9			57.4.19,92	30,272	30,7	27,9	72.58.58,23	B.
	π Arietis.....	1.19,9	15,1	18,9	10,8	16,2	18,2			57.16.16,73		30,5	27,8	73.10.55,37	B.
	) S.L.....	0.61,9	57,8	61,9	54,7	58,9	60,9	7,917	-2	56.26.44,62				72.21.21,94	B.
	) S.L.....	...	...	...	...	...	...	7,995	-1	56.26.44,92				72.21.22,24	B.
	) S.L.....	...	...	...	...	...	...	8,079		56.26.44,99				72.21.22,31	B.
	) S.L.....	...	...	...	...	...	...	8,181	+1	56.26.44,77				72.21.22,09	B.
	) S.L.....	...	...	...	...	...	...	8,279	+2	56.26.44,71				72.21.22,03	B.
	ζ Arietis.....	2.26,6	21,1	25,9	18,1	23,0	25,1			53.37.23,70				69.31.56,68	B.
	g Arietis.....	0.14,9	9,3	12,4	6,0	10,1	12,4			49.55.10,88	30,274	30,2	27,7	65.49.38,55	B.
	τ ⁵ Eridani R.....	2.29,9	26,0	31,5	22,8	27,9	28,7	4,389		127.34.30,58				112.9.28,33	B.
	τ ⁵ Eridani.....	1.58,0	53,7	56,9	49,9	54,0	55,9			96.11.55,05				112.9.26,92	B.
	(e) Venus S.L.....	1.51,2	47,8	53,2	45,8	48,9	50,2		+1½	91.11.49,36	30,288	29,9	29,4	107.8.26,07	B.
	Venus N.L.....	...	...	...	...	...	...	11,042	+1½	91.11.33,16				107.8.9,87	B.
Dec. 21	B.A.C. 549.....	0.29,2	26,4	30,2	21,8	27,7	29,1			57.50.27,47	30,302	32,1	29,9	73.45.6,89	B.
	B.A.C. 650.....	2.57,1	53,7	57,8	48,9	55,1	55,3			56.47.55,13	30,304	31,9	29,5	72.42.34,28	B.
	H. C. 4925.....	1.48,3	43,4	49,0	40,8	45,2	46,8			58.1.45,88	30,302	31,5	28,9	73.56.25,70	B.
	39 Arietis.....	4.31,9	28,1	32,1	23,0	28,8	32,8			45.29.30,20				61.23.51,93	B.
	ζ Arietis.....	2.25,1	22,1	24,6	19,9	23,0	25,2		+¾	53.37.23,75		31,1	29,0	69.31.56,67	B.
	g Arietis.....	0.12,1	9,5	11,7	6,4	10,5	11,4			49.55.10,30		30,9	28,9	65.49.37,92	B.
	(f) τ ⁵ Eridani R.....	2.24,5	22,6	26,4	21,1	23,5	25,5	4,269	+1	127.34.29,25		30,8	28,6	112.9.29,44	B.
	(g) τ ⁵ Eridani.....	1.55,6	52,1	56,0	49,1	54,1	54,2		+3	96.11.53,27				112.9.24,92	B.
	(h)) S.L.....	1.19,5	15,4	18,7	11,9	16,9	17,8	8,390	-2	54.21.53,26	30,300	31,1	28,8	70.16.27,31	B.
	) S.L.....	...	...	...	...	...	...	8,421	-1	54.21.53,81				70.16.27,86	B.
	) S.L.....	...	...	...	...	...	...	8,494		54.21.53,64				70.16.27,69	B.
	) S.L.....	...	...	...	...	...	...	8,606	+1	54.21.52,60				70.16.26,65	B.
	) S.L.....	...	...	...	...	...	...	8,650	+2	54.21.53,05				70.16.27,10	B.
	o ¹ Eridani.....	1.24,9	21,9	26,6	20,2	24,0	26,0	16,793		81.19.7,95	30,302	31,3	29,1	97.14.46,85	B.
	ω ² Tauri.....	3.54,2	50,9	55,1	46,8	51,4	53,8			53.53.52,68				69.48.26,00	B.
	ε Tauri.....	0.31,7	27,9	31,6	24,9	30,1	30,7			55.15.29,57			29,5	71.10.4,92	B.
Dec. 28	(i) ☉ S.L.....	2.30,1	29,0	32,0	24,8	30,1	31,0	16,630		97.35.16,76	29,900	36,5	40,6	113.33.0,74	B.
	☉ N.L.....	2.50,5	50,9	53,1	47,9	50,7	51,4			97.2.50,93				113.0.26,48	B.
Dec. 31	(k) o ¹ Eridani.....	4.12,5	9,9	13,0	7,4	11,1	13,9			81.19.11,57	30,080	38,0	34,8	97.14.48,47	B.
	(l) γ Tauri.....	0.24,9	21,1	24,2	18,8	23,7	24,9			58.50.22,97				74.45.3,23	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',243, 10',257, 10',261, 10',264, 10',266 at the five wires.
 From Dec. 21 = 10',234, 10',244, 10',256, 10',261, 10',263. From Dec. 28 = 10',230, 10',240, 10',252, 10',257, 10',259.
 ONE REVOLUTION = 20'',838. CORRECTION for RUNS = + 5'',0. From Dec. 28 = + 1'',9. ZENITH POINT = 21°.53'.13'',52.
 ASSUMED CO-LATITUDE = 37°.47'.8'',28.

(a) A smaller preceded. (b) Bad definition. (c) Great motion. (d) No correction for Runs. (e) Observed hurriedly on account of clouds. (f) Faint and unsteady. (g) Cloudy. (h) Clouds passing. (i) The microscopes could scarcely be read on account of deposition of moisture. The recorded micrometer reading was 11,630. (k) Faint from cloud. (l) Indistinct.

MEAN NORTH POLAR DISTANCES OF STARS

OBSERVED IN THE YEAR 1844,

AS DEDUCED FROM EACH DAY'S OBSERVATION,

WITH

A CATALOGUE

OF THE

CONCLUDED MEAN NORTH POLAR DISTANCES,

JANUARY 1, 1844,

CORRECTED FOR DISCORDANCE OF ZENITH POINTS, AND
FOR ALTERATION OF CO-LATITUDE.

Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.
	"	0 ' "		"	0 ' "		"	0 ' "		"	0 ' "
H. C. 47310.			α Cassiopeiæ R. <i>continued.</i>			γ Cassiopeiæ R.			η Ceti.		
Sept. 30	+15,54	53.35.33,89	Feb. 1	+19,48	34.19.9,16	Oct. 10	+26,65	30.7.45,90	Sept. 20	+28,52	101.0.38,23
Oct. 2	+16,02	34,27	13	+17,11	7,55	11	+26,98	44,50	Oct. 3	+27,93	36,94
3	+16,24	30,86	Oct. 8	+27,86	9,39				11	+27,37	38,42
α Andromedæ.			15	+29,89	8,66	ϕ^3 Ceti.			Dec. 19	+20,02	37,96
Jan. 1	+15,19	61.46.15,38	31	+34,13	8,20	Sept. 20	+28,78	102.6.45,26	Polaris.		
30	+11,73	13,94	Nov. 20	+38,35	8,54	27	+28,48	44,70	Jan. 1	+26,44	1.31.21,90
Feb. 1	+11,43	13,68	27	+39,49	8,35	Oct. 3	+28,12	43,26	6	+26,94	20,85
13	+9,51	14,18	Dec. 19	+41,36	8,95	7	+27,83	44,15	Feb. 13	+24,34	20,82
Oct. 28	+33,79	14,06	55 Piscium.			\ast \mathcal{R} . 0 ^h .49 ^m .47 ^s .			Mar. 1	+20,64	19,69
Nov. 20	+35,55	13,20	Sept. 30	+28,35	69.25.5,78	Sept. 20	+28,80	103.5.26,15	2	+20,44	19,87
α Andromedæ R.			Oct. 10	+29,63	5,61	Oct. 31	+25,35	25,04	29	+12,44	22,30
Jan. 1	+15,19	61.46.19,41	β Ceti.			Nov. 20	+22,95	26,08	April 1	+11,44	21,62
30	+11,73	17,22	Sept. 20	+29,03	108.50.36,52	ϕ^4 Ceti.			2	+11,14	21,50
Feb. 1	+11,43	14,74	21	+28,95	38,45	Dec. 19	+20,02	102.13.23,71	9	+8,64	22,10
13	+9,51	14,95	Oct. 3	+27,87	36,95	B. o. 962.			22	+4,74	22,00
Oct. 28	+33,79	15,23	β Ceti R.			Sept. 21	+28,61	101.30.17,06	24	+4,24	22,44
Nov. 20	+35,55	15,29	Sept. 20	+29,03	108.50.38,14	Oct. 3	+28,03	15,38	25	+3,94	22,37
β Cassiopeiæ.			21	+28,95	36,79	7	+27,75	17,51	28	+3,14	21,24
Sept. 30	+27,90	31.42.40,11	Oct. 3	+27,87	40,43	31	+25,52	15,31	29	+2,84	20,64
Oct. 2	+28,55	40,61	ζ Andromedæ.			ϵ Piscium.			30	+2,64	21,70
γ Pegasi.			Oct. 7	+28,78	66.34.56,72	Jan. 26	+5,59	82.57.2,69	May 1	+2,34	23,18
Sept. 20	+28,49	75.41.1,65	ζ Andromedæ R.			Sept. 26	+27,48	2,98	6	+1,14	21,28
21	+28,61	0,46	Oct. 7	+28,78	66.34.56,66	27	+27,65	3,30	June 20	-4,96	21,67
γ Pegasi R.			δ Piscium.			Nov. 20	+28,01	2,43	Aug. 29	+6,34	22,49
Sept. 20	+28,49	75.41.1,45	Sept. 26	+28,16	83.15.53,60	21	+27,98	2,27	Sept. 27	+16,44	22,47
21	+28,61	1,66	27	+28,23	53,46	μ Cassiopeiæ.			30	+17,54	23,37
d Piscium.			i Piscium.			Jan. 30	+19,84	35.50.49,21	Oct. 10	+21,34	21,29
Aug. 29	+26,19	82.40.34,00	Sept. 30	+27,36	63.8.24,55	Oct. 15	+27,43	51,47	14	+22,84	22,01
Sept. 25	+28,99	34,21	Oct. 8	+28,69	23,37	\ast \mathcal{R} . 0 ^h .58 ^m .7 ^s .			31	+29,14	20,99
26	+29,06	33,87	Piazzi O. 208.			Sept. 21	+28,41	99.29.49,25	Nov. 9	+32,24	21,11
α Cassiopeiæ.			Oct. 11	+28,90	78.3.51,23	28 Ceti.			20	+35,84	20,61
Jan. 1	+22,67	34.19.9,16	15	+29,12	51,09	Sept. 20	+28,52	100.40.36,33	23	+36,74	20,69
30	+19,82	8,02	20 Ceti.			Oct. 7	+27,72	35,98	Polaris R.		
Feb. 1	+19,48	8,82	Oct. 31	+27,45	91.59.32,96	31 Cassiopeiæ.			Jan. 1	+26,44	1.31.18,54
Oct. 8	+27,86	10,20	Nov. 23	+25,85	31,53	Jan. 24	+23,77	22.3.13,35	6	+26,94	21,11
15	+29,89	8,29	γ Cassiopeiæ.			Oct. 18	+27,01	14,41	Feb. 13	+24,34	20,19
31	+34,13	8,89	Oct. 10	+26,65	30.7.45,66	Nov. 27	+38,23	14,49	Mar. 1	+20,64	19,14
Nov. 20	+38,35	7,79	11	+26,98	46,79				2	+20,44	19,68
27	+39,49	8,74							29	+12,44	19,57
Dec. 19	+41,36	8,92							April 1	+11,44	20,63
α Cassiopeiæ R.									2	+11,14	19,30
Jan. 1	+22,67	34.19.7,14							9	+8,64	19,57
30	+19,82	8,39							22	+4,74	19,15

Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.
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Polaris SP.			θ Ceti R.			Σ 162.			B. i. 988.		
Mar. 26	+ 13,19	1. 31. 21,76	Nov. 27	+ 22,35	98. 59. 24,60	Oct. 3	+ 20,48	42. 52. 57,45	Dec. 6	+ 24,39	79. 5. 58,18
28	+ 12,59	20,05	H. C. 2553.			4 Arietis.			B.A.C. 632.		
April 1	+ 11,29	20,75	Nov. 13			Oct. 10	+ 25,32	73. 49. 23,45	Jan. 15	+ 8,97	72. 29. 56,97
23	+ 4,59	20,39	η Piscium.			Nov. 23	+ 27,09	24,26	Nov. 27	+ 26,08	56,02
23	+ 4,59	19,84	Jan. 26			27	+ 27,10	24,89	Dec. 5	+ 26,87	56,36
May 8	+ 0,84	20,94	Nov. 20			B.A.C. 549.			α Arietis.		
June 10	- 4,51	22,00	Jan. 26			Nov. 27	+ 27,06	73. 45. 34,11	Nov. 23		
July 22	- 2,71	20,43	Nov. 20			Dec. 5	+ 26,97	34,54	α Arietis R.		
Aug. 29	+ 6,19	21,01	η Piscium R.			21	+ 26,53	33,42	Nov. 23		
Sept. 2	+ 7,49	21,08	Nov. 20			B. i. 736.			Nov. 23		
6	+ 8,74	22,71	Nov. 20			Nov. 13	+ 25,53	83. 5. 40,39	B.A.C. 650.		
26	+ 15,89	19,34	101 Piscium.			Σ 179.			Jan. 15	+ 8,81	72. 42. 58,97
27	+ 16,24	19,95	Jan. 16			Nov. 23	+ 30,00	53. 26. 55,67	Dec. 21	+ 25,27	59,55
30	+ 17,39	20,03	B. i. 497.			Dec. 5	+ 31,14	54,81	Σ 221.		
Nov. 15	+ 34,39	21,63	Oct. 27			β Arietis.			Oct. 31	+ 24,89	70. 23. 37,41
20	+ 35,99	20,53	π Piscium.			Jan. 26	+ 9,31	69. 57. 24,04	θ Arietis.		
25	+ 37,39	19,13	Sept. 27			27	+ 9,23	24,67	Jan. 15		
Polaris SP. R.			28			Sept. 27	+ 23,04	23,18	22	+ 8,75	23,59
Mar. 26	+ 13,19	1. 31. 20,85	Dec. 19			28	+ 23,16	24,64	26	+ 8,20	22,71
28	+ 12,59	22,44	103 Piscium.			Nov. 21	+ 27,24	24,16	i Persei.		
April 1	+ 11,29	18,84	Oct. 10			i Arietis.			Feb. 5	+ 19,35	34. 52. 20,15
23	+ 4,59	21,59	Nov. 23			Feb. 5	+ 7,45	72. 56. 47,14	Oct. 17	+ 19,36	20,53
23	+ 4,59	21,36	27			Oct. 3	+ 23,90	46,76	Nov. 23	+ 28,53	21,10
May 8	+ 0,84	20,96	105 Piscium.			Σ 194.			26	+ 29,16	21,41
June 10	- 4,51	17,31	Nov. 27			Oct. 10	+ 23,71	65. 55. 55,25	Dec. 3	+ 30,52	20,55
July 22	- 2,71	21,55	Dec. 5			Nov. 27	+ 27,68	54,77	6	+ 31,04	21,29
Aug. 29	+ 6,19	20,91	B. i. 568.			Dec. 5	+ 27,93	55,64	i Persei R.		
Sept. 2	+ 7,49	22,45	Oct. 31			α Piscium.			Feb. 5	+ 19,35	34. 52. 19,49
6	+ 8,74	20,08	Nov. 9			Jan. 24	+ 2,93	87. 59. 31,15	Oct. 17	+ 19,36	20,00
26	+ 15,89	22,30	B. i. 576.			26	+ 2,81	32,17	Nov. 23	+ 28,53	20,10
27	+ 16,24	21,36	Nov. 9			γ Andromedæ.			26	+ 29,16	20,16
30	+ 17,39	23,26	Oct. 5			Oct. 10	+ 21,41	48. 25. 18,00	Dec. 3	+ 30,52	20,24
Nov. 15	+ 34,39	19,64	τ Ceti.			17	+ 22,93	18,58	6	+ 31,04	20,59
20	+ 35,99	20,55	Oct. 5			31	+ 25,75	18,46	27 Arietis.		
25	+ 37,39	21,61	Oct. 5			Nov. 9	+ 27,39	18,91	Jan. 1	+ 8,67	72. 59. 20,99
37 Ceti.			γ Andromedæ R.			Oct. 10			15	+ 8,03	21,50
Dec. 19	+ 20,51	98. 45. 45,96	Oct. 5			17	+ 22,93	20,12	19	+ 7,82	20,69
B. i. 186.			τ Ceti R.			31	+ 25,75	19,70	22	+ 7,64	20,43
Sept. 30	+ 27,68	96. 8. 54,94	Oct. 5			Nov. 9	+ 27,39	20,97	Dec. 19	+ 23,19	21,57
Oct. 10	+ 27,31	55,02	Nov. 27			Oct. 10			20	+ 23,14	21,37
18	+ 26,84	54,15	Dec. 5			Oct. 10	+ 21,41	48. 25. 19,34			
31	+ 25,86	54,70	B. i. 568.			17	+ 22,93	20,12			
Nov. 9	+ 25,05	54,36	Oct. 31			31	+ 25,75	19,70			
ξ Andromedæ.			Nov. 9			Nov. 9	+ 27,39	20,97			
Nov. 23	+ 34,18	45. 17. 25,17	Oct. 5			γ Andromedæ R.					
ξ Andromedæ R.			Oct. 5			Oct. 10	+ 21,41	48. 25. 19,34			
Nov. 23	+ 34,18	45. 17. 26,33	Nov. 9			17	+ 22,93	20,12			
θ Ceti.			Oct. 5			31	+ 25,75	19,70			
Nov. 27	+ 22,35	98. 59. 24,53	Nov. 9			Nov. 9	+ 27,39	20,97			

Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.
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29 Arietis.			α Ceti R.			δ Persei.			γ Tauri.		
Nov. 26	+22,86	75.39.33,04	Feb. 13	+0,68	86.31.(29,73)	Feb. 10	+14,54	42.43.1,56	Dec. 31	+9,83	74.45.13,06
Dec. 3	+22,74	33,58	Dec. 19	+16,53	33,86	Nov. 27	+17,29	2,15			
30 Arietis.			ζ Arietis.			δ Persei R.			δ^1 Tauri.		
Nov. 26	+23,92	66.2.6,81	Dec. 20	+19,35	69.32.16,03	Feb. 10	+14,54	42.43.0,94	Nov. 13	+10,84	72.49.41,60
Dec. 6	+24,24	6,20	Dec. 21	+19,33	16,00	Nov. 27	+17,29	2,05	Dec. 7	+10,46	41,20
ν Arietis.			α Persei.			ν Persei.			ϵ Tauri.		
Sept. 28	+19,22	68.43.0,13	Jan. 19	+15,82	40.41.57,25	Nov. 13	+14,61	47.55.9,46	Dec. 21	+9,62	71.10.14,54
H. C. 4925.			20	+15,87	56,03	Dec. 3	+17,56	11,43	Aldebaran.		
Jan. 22	+7,01	73.56.47,72	22	+15,94	57,91	ϵ Persei.			Jan. 19	+2,27	73.48.33,41
Feb. 1	+6,41	47,69	Feb. 1	+16,09	58,87	Nov. 13	+12,86	50.26.47,16	20	+2,23	34,09
Dec. 7	+22,23	47,82	5	+15,97	57,51	Dec. 3	+15,47	49,17	26	+2,04	33,51
21	+21,89	47,59	10	+15,82	58,62	7	+15,94	49,08	Feb. 6	+1,71	34,29
μ Arietis.			13	+15,64	57,36	ϵ Persei R.			April 9	-0,38	34,61
Jan. 1	+8,98	70.39.23,73	April 10	+8,02	57,62	Nov. 13	+12,86	50.26.49,26	Dec. 4	+8,75	34,11
20	+8,20	23,19	Dec. 3	+21,18	58,06	Feb. 1	-6,15	103.57.22,69	7	+8,65	34,19
Dec. 3	+22,76	23,70	7	+21,88	58,01	γ Eridani.			Aldebaran R.		
38 Arietis.			19	+23,71	57,98	Jan. 22	-5,17	103.57.22,99	Jan. 19	+2,27	73.48.34,20
Nov. 26	+21,32	78.12.51,02	α Persei R.			Feb. 1	-6,15	22,99	20	+2,23	36,50
Dec. 6	+20,97	51,44	Jan. 19	+15,82	40.41.56,37	γ Eridani R.			26	+2,04	34,76
B.A.C. 845.			20	+15,87	(53,20)	Jan. 22	-5,17	103.57.22,98	Feb. 6	+1,71	34,71
Jan. 19	+4,73	80.32.52,52	22	+15,94	57,64	Feb. 1	-6,15	22,00	April 9	-0,38	36,70
22	+4,55	53,15	Feb. 1	+16,09	(53,07)	A ¹ Tauri.			Dec. 4	+8,75	36,55
Feb. 5	+3,70	51,29	5	+15,97	57,36	Jan. 1	+5,76	68.20.57,76	7	+8,65	36,86
39 Arietis.			10	+15,82	(52,46)	μ Persei.			α Camelopardi.		
Dec. 3	+23,71	61.24.16,25	13	+15,64	58,14	Jan. 15	+12,04	41.59.35,79	Jan. 22	+13,83	23.55.55,22
21	+24,44	16,37	April 10	+8,02	58,54	20	+12,46	36,00	Nov. 13	+1,88	54,69
π Arietis.			Dec. 3	+21,18	57,56	Nov. 13	+9,71	36,51	α Camelopardi R.		
Sept. 28	+19,17	73.11.15,65	7	+21,88	58,28	μ Persei R.			Jan. 22	+13,83	23.55.53,70
Nov. 23	+21,60	16,70	19	+23,71	59,50	Jan. 15	+12,04	41.59.35,97	Nov. 13	+1,88	53,72
Dec. 19	+21,30	16,97	g Arietis.			20	+12,46	36,12	ι Aurigæ.		
20	+21,25	16,62	Jan. 1	+8,52	65.49.58,38	Nov. 13	+9,71	37,78	Dec. 4	+6,17	57.5.13,28
ϵ Arietis.			Dec. 20	+19,04	57,59	ϵ Eridani.			ϵ Aurigæ.		
Nov. 23	+20,97	69.17.13,56	21	+19,06	56,98	Dec. 7	+12,40	99.59.22,40	Jan. 26	+8,36	46.24.51,02
α Ceti.			ψ Persei.			τ^5 Eridani.			Mar. 5	+9,27	51,48
Feb. 13	+0,68	86.31.34,42	Nov. 26	+18,11	42.19.55,52	Jan. 22	-6,97	112.9.34,98	ϵ Aurigæ R.		
Dec. 19	+16,53	32,83	Dec. 3	+19,32	55,53	Dec. 20	+7,71	34,63	Jan. 26	+8,36	46.24.51,45
τ^5 Eridani R.			ϵ Eridani.			21	+7,52	32,44	Mar. 5	+9,27	51,22
Dec. 20	+7,71	112.9.36,04	τ^5 Eridani.			ω^2 Tauri.			η Aurigæ.		
21	+7,52	36,96	Jan. 22	-6,97	112.9.34,98	Jan. 1	+4,75	69.48.39,22	Jan. 19	+6,81	48.58.59,62
τ^5 Eridani R.			Dec. 20	+7,71	34,63	Dec. 7	+11,44	37,21	Mar. 1	+8,26	59,33
Dec. 20	+7,71	112.9.36,04	21	+7,52	32,44	21	+11,37	37,37			

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.
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η Aurigæ R.			B. v. 303.			* R. 5 ^h . 26 ^m . 23 ^s .			β Aurigæ R.		
Jan. 19	+ 6,81	48. 58. 60,45	Feb. 13	- 4,79	86. 8. 55,44	Feb. 20	- 3,48	83. 33. 26,20	Feb. 3	+ 4,84	45. 4. 33,70
Mar. 1	+ 8,26	59,76	16	- 4,94	57,32				20	+ 6,19	33,92
Σ 652.			20	- 5,14	54,93	ζ Tauri.			Mar. 5	+ 6,77	32,07
			Mar. 5	- 5,63	55,45				April 2	+ 6,23	35,13
			9	- 5,72	55,07				9	+ 5,78	33,55
			B.A.C. 1661.			Jan. 31	- 0,05	68. 57. 31,49	25	+ 4,30	34,47
Dec. 4	+ 4,07	89. 9. 30,94				Nov. 26	+ 0,54	31,03	29	+ 3,85	33,75
Capella.			Jan. 1	- 1,30	86. 35. 13,47	B. v. 802.			H. C. 11457.		
			15	- 2,74	11,00				Mar. 9	- 5,87	80. 50. 33,71
Feb. 3	+ 8,33	44. 10. 4,27	19	- 3,10	11,08	Feb. 16	- 4,75	82. 46. 32,17	12	- 5,93	34,34
10	+ 8,82	2,99	20	- 3,20	11,02	20	- 4,90	29,63	1 Lyncis.		
Mar. 2	+ 9,31	3,64	26	- 3,71	11,44	22	- 4,99	29,46	Feb. 3	+ 7,10	28. 26. 39,48
5	+ 9,28	4,64	Feb. 6	- 4,52	11,50	Mar. 5	- 5,35	32,77	16	+ 9,07	37,94
April 9	+ 7,02	3,83	m Orionis.			B. v. 925.			20	+ 9,57	38,20
10	+ 6,92	3,25	Jan. 15	- 2,74	86. 36. 38,85				22	+ 9,78	38,63
24	+ 5,20	4,20	19	- 3,11	39,34	Mar. 1	- 5,42	82. 38. 50,90	Mar. 5	+ 10,89	39,17
25	+ 5,07	3,72	20	- 3,20	39,51	5	- 5,83	52,65	1 Lyncis R.		
26	+ 4,94	3,80	22	- 3,39	41,49	B. v. 1015.			Feb. 3	+ 7,10	28. 26. 38,83
May 1	+ 4,28	4,30	26	- 3,72	39,40				16	+ 9,07	37,91
2	+ 4,14	1,96	Feb. 6	- 4,53	39,15	Feb. 24	- 5,23	82. 6. 2,41	20	+ 9,57	37,27
Aug. 6	- 6,02	5,18	* R. 5 ^h . 15 ^m . 21 ^s .			Mar. 5	- 5,53	3,10	22	+ 9,78	36,34
7	- 6,05	4,75	Dec. 4	+ 2,68	85. 29. 47,19	9	- 5,61	1,89	Mar. 5	+ 10,89	37,64
Nov. 26	+ 1,62	5,12	B. v. 356.			31 Camelopardi.			η Geminorum.		
Capella R.			Mar. 6	- 5,32	84. 49. 51,11				April 23	- 2,36	67. 27. 13,25
Feb. 3	+ 8,33	44. 10. (11,26)	β Tauri.			31 Camelopardi R.			μ Geminorum.		
10	+ 8,82	2,02	Mar. 29	+ 2,10	61. 31. 48,50				Feb. 1	- 2,52	67. 24. 44,53
Mar. 2	+ 9,31	4,56	April 23	+ 0,84	50,44	Feb. 6	+ 17,98	30. 9. 30,80	Mar. 26	- 2,28	43,48
5	+ 9,28	1,80	Nov. 26	+ 1,42	50,72	α Orionis.			April 23	- 2,69	42,94
April 9	+ 7,02	5,11	β Tauri R.						Sept. 5	- 3,53	43,49
10	+ 6,92	6,16	Mar. 29	+ 2,10	61. 31. 51,80	Feb. 22	- 5,66	82. 37. 38,58	Nov. 26	- 5,93	45,13
24	+ 5,20	4,71	April 23	+ 0,84	51,11	Mar. 29	- 6,30	37,98	β Canis Majoris.		
25	+ 5,07	4,68	A Orionis.			Dec. 4	- 1,18	38,89	Jan. 31	- 10,64	107. 52. 58,49
26	+ 4,94	4,41	Jan. 15	- 2,59	84. 10. 34,33	α Orionis R.			Feb. 22	- 13,78	58,31
May 1	+ 4,28	4,11	19	- 2,91	35,06				β Canis Majoris R.		
2	+ 4,14	6,00	20	- 3,00	33,84	Feb. 22	- 5,66	82. 37. 39,19	Jan. 31	- 10,64	107. 52. 57,46
Aug. 6	- 6,02	5,09	22	- 3,16	33,95	Mar. 29	- 6,30	39,71	Feb. 22	- 13,78	59,51
7	- 6,05	4,50	26	- 3,45	33,00	Dec. 4	- 1,18	40,77	γ Geminorum.		
Nov. 26	+ 1,62	4,94	Feb. 3	- 4,00	34,48	β Aurigæ.			Feb. 3	- 4,80	73. 28. 24,10
Rigel.			6	- 4,19	34,35				Mar. 12	- 5,09	23,29
Jan. 15	- 4,85	98. 23. 12,58	B. v. 623.			Feb. 3	+ 4,84	45. 4. 31,49	20	- 5,10	23,11
26	- 6,29	11,03	Feb. 13	- 4,64	83. 55. 52,16	20	+ 6,19	32,33	26	- 5,12	23,10
Dec. 4	+ 3,79	9,31	16	- 4,81	52,41	Mar. 5	+ 6,77	32,34	29	- 5,12	22,58
7	+ 3,23	9,76	Mar. 5	- 5,44	53,06	April 2	+ 6,23	31,21	30	- 5,11	23,78
Rigel R.			Dec. 4	+ 1,50	52,93	9	+ 5,78	32,26	Sept. 5	- 2,66	23,66
Jan. 15	- 4,85	98. 23. 9,41				25	+ 4,30	32,22	Nov. 26	- 6,72	23,53
26	- 6,29	10,96				29	+ 3,85	31,52			
Dec. 4	+ 3,79	14,20									
7	+ 3,23	14,41									
B. v. 294.											
Feb. 22	- 5,06	85. 41. 8,19									
Mar. 1	- 5,34	1,08									

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.
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γ Geminorum R.			δ Geminorum.			Pollux.			θ Cancrī.		
Feb. 3	-4,80	73.28.25,47	Jan. 26	-6,40	67.44.9,33	Jan. 10	-7,99	61.36.7,79	Feb. 2	-11,15	71.22.55,57
Mar. 12	-5,09	23,85	Feb. 1	-6,39	9,06	19	-7,74	7,93	3	-11,17	56,45
20	-5,10	24,38	2	-6,38	8,27	24	-7,56	7,26	Mar. 28	-9,98	56,66
26	-5,12	25,22	27	-5,86	7,54	Feb. 1	-7,23	8,48	δ Hydræ.		
29	-5,12	24,60	Mar. 23	-5,26	8,36	8	-6,88	8,33	April 8		
30	-5,11	25,98	28	-5,16	8,07	10	-6,78	8,87	-14,03	83.45.21,34	
ϵ Geminorum.			April 6	-5,04	9,03	April 6	-4,19	6,88	δ Hydræ R.		
Jan. 31	-3,36	64.43.13,56	23	-4,90	8,87	8	-4,04	7,61	April 8		
Feb. 1	-3,34	13,51	24	-4,90	8,82	10	-3,98	8,33	-14,03	83.45.23,18	
15 Lyncis.			δ Geminorum R.			Pollux R.			Σ 1263.		
Feb. 3	+2,59	31.22.57,11	Jan. 26	-6,40	67.44.9,14	Jan. 10	-7,99	61.36.8,10	April 8		
8	+3,48	56,46	Feb. 1	-6,39	10,54	19	-7,74	9,46	-2,22	47.44.26,50	
27	+6,36	53,47	27	-5,86	8,54	24	-7,56	11,18	δ Cancrī.		
Mar. 6	+7,22	53,54	Mar. 23	-5,26	8,95	Feb. 1	-7,23	10,14	Jan. 7	-10,78	71.16.34,76
12	+7,71	53,38	28	-5,16	10,50	8	-6,88	9,40	Mar. 1	-11,62	34,92
15 Lyncis R.			April 6	-5,04	10,60	10	-6,78	7,99	28	-10,59	34,39
Feb. 3	+2,59	31.22.57,12	Castor.			April 6	-4,19	7,76	29	-10,54	33,60
8	+3,48	55,64	Jan. 10	-7,19	57.46.30,45	8	-4,04	8,69	April 25	-9,43	34,01
27	+6,36	53,00	Feb. 8	-5,39	31,20	10	-3,98	8,13	Oct. 6	-13,90	35,40
Mar. 6	+7,22	52,81	10	-5,25	31,56	25	-3,78	8,15	ϵ Hydræ.		
12	+7,71	53,35	27	-5,04	30,12	g Geminorum.			Feb. 19	-13,61	83.0.45,50
ω Geminorum.			April 6	-2,23	30,51	Jan. 5	-7,67	71.6.51,00	22	-13,75	46,24
Jan. 26	-4,90	65.34.3,00	8	-2,19	31,04	ζ Cancrī.			ϵ Hydræ R.		
ζ Geminorum.			Castor R.			Jan. 5	-8,99	71.53.11,07	Feb. 19	-13,61	83.0.46,77
Jan. 5	-5,26	69.12.22,70	Jan. 10	-7,19	57.46.(26,20)	Feb. 2	-10,11	11,79	22	-13,75	47,37
10	-5,39	23,14	Feb. 8	-5,39	31,65	Mar. 1	-9,94	14,04	Σ 1281.		
19	-5,52	22,04	10	-5,25	31,95	β Cancrī.			April 8		
Feb. 16	-5,45	22,98	27	-5,04	30,33	Jan. 10	-8,97	80.20.18,19	-16,28	89.24.32,27	
Mar. 12	-5,09	23,53	April 6	-2,23	32,84	Mar. 23	-12,24	16,62	$H. C. 17526.$		
April 6	-4,83	23,67	8	-2,19	31,30	April 1	-12,14	16,38	Feb. 19	-8,73	45.43.56,54
24	-4,78	23,11	k Geminorum.			8	-11,99	18,05	ι Ursæ Majoris.		
ζ Geminorum R.			Feb. 2	-8,12	73.50.35,85	β Cancrī R.			Feb. 13	-9,35	41.21.1,08
Jan. 10	-5,39	69.12.22,58	Mar. 28	-7,98	33,95	Jan. 10	-8,97	80.20.16,77	22	-7,75	0,46
19	-5,52	24,03	23 Lyncis.			Mar. 23	-12,24	17,56	27	-6,90	1,95
Feb. 16	-5,45	25,09	Jan. 26	-3,83	32.34.7,21	April 1	-12,14	18,09	April 8	-0,99	1,97
Mar. 12	-5,09	24,08	31	-2,81	10,27	8	-11,99	17,00	23	+0,03	1,43
April 6	-4,83	23,66	Mar. 5	+3,22	10,67	\circ Ursæ Majoris.			24	+0,07	1,86
Σ 1033.			23 Lyncis R.			Jan. 31	-7,40	28.46.3,76	May 2	+0,33	0,33
Mar. 12	+4,66	37.11.46,40	Jan. 26	-3,83	32.34.7,91	Feb. 2	-6,94	3,28	ι Ursæ Majoris R.		
Σ 1037.			Mar. 5	+3,22	8,29	April 10	+4,62	1,14	Feb. 13	-9,35	41.21.1,14
Mar. 12	-3,39	62.31.0,06	Procyon.			\circ Ursæ Majoris R.			22	-7,75	1,24
			Mar. 26	-12,10	84.22.45,37	Jan. 31	-7,40	28.45.64,31			
			Procyon R.			Feb. 2	-6,94	60,74			
			Mar. 26	-12,10	84.22.47,64	April 10	+4,62	59,32			

Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.
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<i>Ursæ Majoris R. continued.</i>			<i>α Hydræ.</i>			<i>π Leonis continued.</i>			<i>Σ₂ 218.</i>		
Feb. 27	-6,90	41.21. 1,70	Mar. 28	-19,49	97.59. 7,23	Feb. 19	-16,06	81.12. 35,64	April 24	-17,51	85.38. 33,08
April 8	-0,99	1,83	30	-19,59	5,51	22	-16,19	37,33	<i>Σ 1439.</i>		
23	+0,03	2,17	April 25	-19,99	7,30	Mar. 2	-16,49	35,85	<i>Mar. 13 -15,82 68.23. 56,54</i>		
24	+0,07	0,33	<i>α Hydræ R.</i>			30	-16,37	35,12	<i>ρ Leonis.</i>		
May 2	+0,33	0,38	<i>Mar. 28 -19,49 97.59. 7,92</i>			April 27	-15,31	35,58	<i>May 25 -14,00 79.53. 33,18</i>		
<i>α² Cancri.</i>			<i>Mar. 30 -19,59 4,21</i>			<i>π Leonis R.</i>			<i>Σ 1445.</i>		
Jan. 7	-10,54	77.32. 30,70	April 25	-19,99	9,94	Jan. 31	-14,67	81.12. 34,43	<i>April 24 -18,93 90. 3. 46,89</i>		
Mar. 1	-13,55	30,41	<i>ξ Leonis.</i>			Feb. 19	-16,06	35,80	<i>37 Ursæ Majoris.</i>		
April 25	-12,19	32,24	<i>Jan. 7 -11,58 78. 0. 45,75</i>			22	-16,19	34,49	<i>Mar. 6 -11,79 32. 6. 58,89</i>		
<i>κ Cancri.</i>			<i>Feb. 3 -14,16 44,98</i>			<i>Regulus.</i>			<i>28 -6,57 57,65</i>		
Feb. 3	-13,21	78.42. 27,82	Mar. 29	-14,58	42,49	Feb. 5	-15,61	77.16. 20,86	<i>30 -6,15 59,79</i>		
Mar. 29	-13,85	26,82	30	-14,55	43,33	22	-16,33	22,32	<i>37 Ursæ Majoris R.</i>		
<i>Σ₂ 197.</i>			<i>Σ₂ 205.</i>			Mar. 5	-16,37	21,05	<i>Mar. 6 -11,79 32. 6. 58,08</i>		
April 8	-16,09	86.25. 41,84	April 10	-5,30	48.19. 0,26	April 25	-14,31	21,04	<i>28 -6,57 59,76</i>		
<i>Σ 1318.</i>			<i>ο Leonis.</i>			Sept. 19	-13,51	22,20	<i>30 -6,15 59,43</i>		
Mar. 21	-4,47	42.22. 22,19	<i>Jan. 7 -11,57 79.24. 3,12</i>			<i>Regulus R.</i>			<i>Σ 1457.</i>		
<i>Σ 1322.</i>			<i>May 23 -12,94 3,61</i>			Feb. 5	-15,61	77.16. 21,85	<i>Mar. 13 -17,97 83.27. 24,07</i>		
April 2	-12,17	72.50. 15,75	<i>May 24 -12,89 2,88</i>			22	-16,33	22,75	<i>B.A.C. 3649.</i>		
<i>Σ 1324.</i>			<i>Oct. 6 -14,00 3,55</i>			Mar. 5	-16,37	22,75	<i>April 16 -16,57 80.20. 47,71</i>		
April 3	-9,15	63.10. 55,97	<i>ε Leonis.</i>			April 25	-14,31	21,25	<i>42 Leonis Minoris.</i>		
<i>Σ 1332.</i>			<i>Feb. 22 -14,56 65.30. 36,77</i>			Sept. 19	-13,51	21,37	<i>Mar. 30 -12,80 58.29. 50,97</i>		
April 8	-9,75	65.41. 46,64	<i>Mar. 28 -11,85 35,81</i>			<i>λ Ursæ Majoris.</i>			<i>April 16 -10,50 50,35</i>		
<i>Σ₂ 201.</i>			<i>ε Leonis R.</i>			Mar. 1	-13,41	46.18. 31,20	<i>24 -9,51 50,22</i>		
April 3	-9,09	61.26. 6,28	<i>Feb. 22 -14,56 65.30. 37,01</i>			2	-13,24	32,23	<i>29 -8,94 51,13</i>		
<i>Σ 1355.</i>			<i>Mar. 28 -11,85 39,01</i>			April 16	-5,67	31,38	<i>42 Leonis Minoris R.</i>		
April 3	-15,77	83. 5. 10,72	<i>υ Ursæ Majoris.</i>			18	-15,39	30,84	<i>Mar. 30 -12,80 58.29. 52,69</i>		
<i>h Ursæ Majoris.</i>			<i>Feb. 10 -13,42 30.13. 53,41</i>			24	-4,64	32,02	<i>April 16 -10,50 52,08</i>		
Jan. 24	-14,94	26.15. 39,47	<i>Mar. 1 -11,37 51,41</i>			<i>λ Ursæ Majoris R.</i>			<i>24 -9,51 52,89</i>		
Mar. 1	-6,20	39,80	<i>Mar. 1 -8,79 53,36</i>			Mar. 1	-13,41	46.18. 31,13	<i>29 -8,94 46,80</i>		
April 8	+1,45	41,10	<i>April 24 +1,17 52,39</i>			2	-13,24	31,19	<i>ω Ursæ Majoris.</i>		
<i>h Ursæ Majoris R.</i>			<i>April 25 +1,24 52,68</i>			April 16	-5,67	32,99	<i>Mar. 6 -15,11 45.58. 51,46</i>		
Jan. 24	-14,94	26.15. 40,02	<i>υ Ursæ Majoris R.</i>			18	-13,67	7,55	<i>28 -10,88 50,64</i>		
Mar. 1	-6,20	40,89	<i>Feb. 10 -13,42 30.13. 52,10</i>			<i>μ Hydræ.</i>			<i>April 18 -7,09 51,22</i>		
April 8	+1,45	38,97	<i>Mar. 1 -11,37 52,37</i>			<i>Feb. 19 -15,76 106. 2. 29,56</i>			<i>27 -5,71 50,86</i>		
<i>π Leonis.</i>			<i>Mar. 1 -8,79 52,87</i>			<i>μ Hydræ R.</i>					
Jan. 31	-14,67	81.12. 37,85	<i>April 24 +1,17 51,15</i>			<i>Feb. 19 -15,76 106. 2. 30,28</i>					
Feb. 5	-15,13	35,54	<i>April 25 +1,24 53,52</i>								

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ω Ursæ Majoris R.			σ Leonis.			ο Virginis.			Σ ₂ 251.		
Mar. 6	-15,11	45.58.52,12	April 29	-17,23	83. 6. 58,01	Mar. 13	-19,16	80. 23. 61,74	April 17	-13,78	57. 44. 36,24
28	-10,88	52,88				20	-19,06	59,95	29	-11,62	38,20
April 18	- 7,09	52,46	λ Draconis.			25	-18,90	59,97	δ Corvi.		
27	- 5,71	51,37	Mar. 25	-9,35	19. 48. 35,70	April 2	-18,56	59,58	April 27 -21,57 105.38.44,43		
Σ 1500.			λ Draconis R.			ο Virginis R.			δ Corvi R.		
April 16	-18,74	92. 38. 16,03	Mar. 25	-9,35	19. 48. 33,38	Mar. 13	-19,16	80. 23. 60,04	April 27 -21,57 105.38.45,87		
d Leonis.			e Leonis.			20	-19,06	59,06	q Virginis.		
Feb. 5	-15,88	85. 32. 45,49	Mar. 5	-18,41	92. 8. 35,79	25	-18,90	60,72	Mar. 5	-17,10	98. 35. 25,69
April 27	-17,83	45,20	υ Leonis.			April 2	-18,56	60,55	6	-17,21	25,56
Σ 1501.			April 29	-19,16	89. 57. 45,51	27	-16,89	60,46	April 29	-20,32	25,47
April 18	-10,88	58. 20. 11,55	χ Ursæ Majoris.			Σ 1606.			30	-20,34	24,14
α Ursæ Majoris.			April 1	-12,24	41. 21. 18,47	Mar. 23	-16,70	49. 14. 21,25	Σ 1659.		
April 29	- 1,07	27. 24. 30,23	27	- 6,61	20,59	28	-15,68	20,53	April 4	-19,70	101. 9. 33,54
Sept. 19	-21,16	31,43	χ Ursæ Majoris R.			May 13	- 6,63	22,00	Σ 1661.		
Oct. 10	-27,96	30,12	April 1	-12,24	41. 21. 17,67	15	- 6,33	22,40	Mar. 28	-18,85	77. 43. 51,73
α Ursæ Majoris R.			27	- 6,61	22,33	δ Ursæ Majoris.			γ Virginis.		
April 29	- 1,07	27. 24. 28,43	β Virginis.			Mar. 13	-17,51	32. 5. 60,53	Mar. 29	-19,14	90. 35. 32,61
Sept. 19	-21,16	28,72	Mar. 5	-18,66	87. 21. 23,12	20	-15,71	58,86	γ Virginis R.		
Oct. 10	-27,96	29,93	May 27	-16,87	23,67	April 1	-12,50	60,60	Mar. 29	-19,14	90. 35. 33,38
ψ Ursæ Majoris.			June 22	-15,21	23,45	4	-11,68	59,46	Σ ₂ 254.		
Mar. 6	-16,02	44. 39. 21,72	B.A.C. 4006.			30	- 5,14	59,79	April 17	-9,50	30. 16. 24,32
13	-14,65	21,93	Mar. 25	-19,68	94. 27. 56,40	δ Ursæ Majoris R.			30	-6,08	26,53
28	-11,58	21,41	γ Ursæ Majoris.			Mar. 13	-17,51	32. 5. 61,25	Σ 1678.		
ψ Ursæ Majoris R.			Mar. 13	-16,50	35. 26. 16,00	20	-15,71	58,75	Σ 1680.		
Mar. 6	-16,02	44. 39. 22,97	23	-14,00	(20,06)	April 1	-12,50	58,44	April 30	-13,88	67. 22. 17,08
13	-14,65	22,56	γ Ursæ Majoris R.			4	-11,68	59,27	ψ Virginis.		
28	-11,58	22,23	Mar. 13	-16,50	35. 26. 16,38	30	- 5,14	61,06	Mar. 6	-16,72	98. 41. 25,19
φ Leonis.			23	-14,00	(12,52)	η Virginis.			May 27	-19,27	25,10
Feb. 5	-14,72	92. 47. 57,52	Σ 1582.			April 1	-19,37	89. 47. 55,49	ε Ursæ Majoris.		
δ Crateris.			Mar. 28	-17,32	67. 8. 55,95	2	-19,39	55,81	Mar. 26	-16,49	33. 11. 32,58
Mar. 6	-18,07	103.56. 4,48	Σ 1633.			29	-18,84	55,59	29	-15,68	32,72
13	-19,08	4,90	Σ 1633.			30	-18,81	53,03			
δ Crateris R.			Σ 1633.			May 27	-17,37	56,87			
Mar. 6	-18,07	103.56. 4,48	Σ 1633.			Σ 1633.					
13	-19,08	4,90	Σ 1633.			Mar. 13	-19,46	62. 4. 25,22			
δ Crateris R.			Σ 1633.			26	-17,78	25,82			
Mar. 6	-18,07	103.56. 4,48	Σ 1633.			28	-17,50	24,22			
13	-19,08	4,90	Σ 1633.			H. C. 23132.					
δ Crateris R.			Σ 1633.			May 13	-10,91	64. 8. 8,63			
Mar. 6	-18,07	103.56. 4,48	Σ 1633.			23	- 9,62	9,76			
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
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13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
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Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48	Σ 1633.								
13	-19,08	4,90	Σ 1633.								
δ Crateris R.			Σ 1633.								
Mar. 6	-18,07	103.56. 4,48									

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.
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ϵ Ursæ Majoris <i>continued.</i>			53 Virginis.			B. XIII. 375.			η Ursæ Majoris R. <i>continued.</i>		
April 1	-14,86	33.11.31,65	May 27	-20,41	105.21.17,91	April 17	-18,30	97.3.20,36	May 6	-8,88	39.54.22,48
29	-7,25	33,53				May 27	-17,51	21,44	8	-8,00	23,84
May 6	-5,52	31,80	B. XIII. 113.			Σ , 269.			13	-6,73	22,96
8	-5,06	31,56	April 29	-18,87	97.13.49,40	April 29	-12,20	54.17.18,51	27	-3,37	21,59
ϵ Ursæ Majoris R.			May 2	-18,85	49,36	May 2	-11,53	18,20	June 14	-0,03	22,11
Mar. 26	-16,49	33.11.33,13	21 Canum Venaticorum.			B.A.C. 4530.			17	+0,42	23,69
29	-15,68	32,45	April 4	-15,91	39.29.43,99	April 6	-18,12	89.50.45,84	x Virginis.		
April 1	-14,86	32,11	17	-12,47	43,88	18	-17,80	44,26	May 1	-18,42	107.21.13,74
29	-7,25	31,25	May 13	-5,86	44,50	23	-17,63	44,53	Σ , 271.		
May 6	-5,52	32,91	21 Canum Venaticorum R.			Σ 1768.			April 23	-16,32	79.5.25,23
8	-5,06	32,45	April 4	-15,91	39.29.45,32	April 17	-14,81	52.54.31,76	29	-15,65	27,55
Σ 1690.			17	-12,47	44,54	18	-15,18	30,23	η Bootis.		
Mar. 28	-18,80	94.1.0,28	May 13	-5,86	47,84	23	-13,44	31,17	April 3	-18,30	70.49.1,81
May 18	-18,32	2,70	Σ 1734.			m Virginis.			June 29	-6,06	3,40
α Canum Venaticorum.			May 17	-15,82	86.14.12,20	Mar. 30	-17,37	97.54.47,34	η Bootis R.		
April 4	-16,20	50.50.14,96	Σ 1737.			April 4	-17,59	47,76	April 3	-18,30	70.49.4,75
17	-13,40	13,72	May 27	-10,91	71.24.53,22	Σ 1776.			June 29	-6,06	5,41
α Canum Venaticorum R.			Σ 1742.			May 1	-10,13	42.59.21,53	Σ , 273.		
April 4	-16,20	50.50.16,45	Mar. 30	-18,47	87.47.0,87	31	-3,10	23,30	April 4	-17,87	83.56.27,89
17	-13,40	15,59	Spica.			η Ursæ Majoris.			18	-16,99	29,54
ϵ Virginis.			April 2	-17,96	100.20.41,19	Mar. 30	-18,32	39.54.22,85	τ Virginis.		
May 2	-15,82	78.12.3,18	3	-18,02	42,63	April 2	-17,58	21,52	April 2	-17,61	87.41.51,68
ϵ Virginis R.			18	-18,68	40,58	4	-17,08	21,06	α Draconis.		
May 2	-15,82	78.12.7,08	29	-18,92	42,02	6	-16,58	21,63	April 6	-15,99	24.52.39,58
Σ 1719.			May 1	-18,94	41,19	17	-13,62	20,38	23	-10,78	38,26
Mar. 30	-18,75	88.34.29,67	2	-18,94	41,27	18	-13,34	22,09	May 2	-8,02	38,04
April 29	-17,84	28,71	8	-18,94	41,43	23	-11,97	20,49	13	-4,78	36,23
Σ , 260.			June 24	-17,44	40,92	27	-10,89	22,38	α Draconis R.		
April 4	-17,59	62.13.10,26	29	-17,14	41,20	29	-10,35	22,96	April 6	-15,99	24.52.34,68
17	-15,37	9,18	Spica R.			May 2	-9,56	22,15	23	-10,78	36,42
May 2	-12,68	10,11	April 3	-18,02	100.20.42,19	6	-8,88	21,15	May 2	-8,02	36,40
θ Virginis.			18	-18,68	43,69	8	-8,00	20,62	13	-4,78	37,03
April 2	-18,67	94.42.14,24	29	-18,92	44,96	13	-6,73	20,61	Σ 1804.		
3	-18,68	15,79	May 1	-18,94	43,34	27	-3,37	22,16	May 27	-9,38	68.3.39,66
Dec. 4	-18,77	13,81	2	-18,94	42,24	June 14	-0,03	20,42	κ Virginis.		
Σ 1727.			8	-18,94	42,90	17	+0,42	20,83	April 3	-16,15	99.32.39,06
Mar. 5	-21,70	57.47.59,29	June 29	-17,14	41,53	18	-13,34	20,65	4	-16,19	39,27
			Σ , 266.			23	-11,97	20,96			
			April 4	-18,28	73.28.53,02	27	-10,89	22,30			
			6	-18,07	54,94	29	-10,35	20,30			
			23	-16,00	52,50	May 2	-9,56	22,22			

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.
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Σ 1819.			Piazzi XIV. 148.			Σ 1898.			β Coronæ Borealis R.		
April 6	-17,18	86 . 8 . 28,90	April 18	-14,72	37 . 44 . 43,62	April 25	-12,55	30 . 4 . 30,54	May 17	-9,13	60 . 21 . 10,24
Arcturus.			25	-12,68	44,03	June 11	+ 1,20	31,96	July 29	+ 4,12	11,32
April 18	-16,75	70 . 0 . 9,10	May 1	-10,95	43,60	Σ 1907.			γ Draconis.		
May 15	-12,42	9,24	13	-7,43	41,61	April 25	-14,46	77 . 45 . 22,35	May 1	-11,45	30 . 29 . 7,35
June 17	-7,43	7,26	27	-3,55	43,71	γ Bootis.			27	-3,28	7,11
24	-6,57	8,35	Σ 1876.			April 25	-14,46	77 . 45 . 22,35	June 10	+ 0,74	7,26
29	-5,97	8,81	June 17	-12,44	96 . 43 . 42,78	γ Bootis R.			July 15	+ 7,98	6,30
July 29	-3,87	9,59	ϵ Bootis.			April 3	-19,29	41 . 44 . 8,44	γ Draconis R.		
Sept. 26	-7,24	8,09	June 24	-2,57	62 . 15 . 52,06	8	-18,10	8,43	May 1	-11,45	30 . 29 . 8,53
30	-7,85	9,71	July 24	+ 0,73	52,23	May 1	-11,84	7,58	27	-3,28	7,05
Arcturus R.			ϵ Bootis R.			27	-4,36	8,05	June 10	+ 0,74	7,74
April 18	-16,75	70 . 0 . 10,77	June 24	-2,57	62 . 15 . 54,44	June 10	-0,74	7,53	July 15	+ 7,98	6,90
May 15	-12,42	9,17	July 24	+ 0,73	53,33	13	-0,03	7,78	Σ 1956.		
June 17	-7,43	11,46	56 Hydræ.			14	+ 0,19	8,04	April 27	-13,62	47 . 39 . 53,54
24	-6,57	10,97	June 10	-16,95	115 . 25 . 44,57	17	+ 1,14	6,57	May 13	-9,17	52,36
29	-5,97	10,51	13	-17,01	46,19	γ Bootis R.			α Coronæ Borealis.		
July 29	-3,87	10,05	14	-17,04	43,11	April 3	-19,29	41 . 44 . 9,00	Sept. 26	+ 2,75	62 . 45 . 22,61
Sept. 26	-7,24	10,46	Σ 1879.			8	-18,10	7,56	α Coronæ Borealis R.		
30	-7,85	10,68	May 13	-12,66	79 . 40 . 54,90	May 1	-11,84	9,14	Sept. 26	+ 2,75	62 . 45 . 24,38
λ Virginis.			18	-11,99	56,54	27	-4,36	8,69	Σ 298.		
April 3	-15,52	102 . 38 . 57,66	Σ 1884.			June 10	-0,74	8,83	May 27	-5,43	49 . 40 . 51,39
May 1	-16,50	57,24	June 10	-5,40	64 . 58 . 55,29	13	-0,03	8,68	Σ 1963.		
2	-16,50	57,64	α^3 Libræ.			14	+ 0,19	8,18	May 13	-9,92	59 . 22 . 59,93
ϕ Virginis.			May 13	-12,66	79 . 40 . 54,90	17	+ 1,14	9,19	α Serpentis.		
April 6	-16,38	91 . 31 . 31,72	18	-11,99	56,54	21	+ 1,81	7,75	May 31	-8,19	83 . 4 . 46,33
June 14	-12,29	31,29	Σ 1885.			β Libræ.			June 29	-4,33	44,99
17	-12,08	30,87	May 1	-14,55	105 . 23 . 21,37	May 13	-12,62	98 . 48 . 10,08	Σ 295.		
Σ 1847.			2	-14,57	20,46	β Libræ R.			April 25	-14,15	52 . 35 . 17,66
May 17	-15,51	99 . 30 . 7,84	α^2 Libræ R.			May 13	-12,62	98 . 48 . 11,58	June 15	-1,32	17,41
γ Bootis.			May 1	-14,55	105 . 23 . 19,58	Σ 295.			α Serpentis R.		
April 2	-19,00	51 . 0 . 22,44	2	-14,57	21,98	April 25	-14,15	52 . 35 . 17,66	May 31	-8,19	83 . 4 . 45,45
18	-15,40	23,35	Σ 1885.			June 15	-1,32	17,41	June 29	-4,33	44,99
23	-14,18	22,54	April 3	-15,82	89 . 22 . 39,66	Piazzi XV. 74.			γ Coronæ Borealis.		
May 1	-12,17	22,70	Σ 286.			April 25	-14,18	52 . 6 . 7,71	April 27	-13,62	63 . 12 . 22,08
27	-5,70	23,14	April 18	-15,29	42 . 46 . 12,55	27	-13,68	8,48	β Serpentis.		
31	-4,79	22,92	June 13	-0,30	11,69	B. xv. 358.			April 8	-15,82	74 . 5 . 7,43
June 10	-2,66	22,59	Σ 288.			April 8	-14,98	84 . 12 . 44,68	γ Coronæ Borealis.		
21	+ 0,50	23,46	June 17	-6,14	73 . 39 . 14,53	May 13	-11,51	42,27	April 27	-13,62	63 . 12 . 22,08
July 11	+ 2,00	21,56	22	-5,43	15,78	β Coronæ Borealis.			May 17	-9,13	60 . 21 . 10,24
γ Bootis R.			Σ 298.			July 29	+ 4,12	11,01	July 29	+ 4,12	11,01
April 2	-19,00	51 . 0 . 24,58	April 18	-15,29	42 . 46 . 12,55	β Coronæ Borealis.			γ Coronæ Borealis.		
18	-15,40	23,74	June 13	-0,30	11,69	β Coronæ Borealis.			April 27	-13,62	63 . 12 . 22,08
23	-14,18	24,59	Σ 288.			β Coronæ Borealis.			May 17	-9,13	60 . 21 . 10,24
May 1	-12,17	24,33	June 17	-6,14	73 . 39 . 14,53	β Coronæ Borealis.			July 29	+ 4,12	11,01
27	-5,70	21,98	22	-5,43	15,78	β Coronæ Borealis.			γ Coronæ Borealis.		
31	-4,79	23,91	Σ 288.			β Coronæ Borealis.			April 27	-13,62	63 . 12 . 22,08
June 10	-2,66	24,05	June 17	-6,14	73 . 39 . 14,53	β Coronæ Borealis.			May 17	-9,13	60 . 21 . 10,24
21	+ 0,50	24,98	22	-5,43	15,78	β Coronæ Borealis.			July 29	+ 4,12	11,01
July 11	+ 2,00	23,22	Σ 288.			β Coronæ Borealis.			γ Coronæ Borealis.		

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Σ 1973.			τ Herculis R.			ζ Herculis.			Piazzi XVI. 270.		
May 13	-9,53	53. 4. 7,42	June 7	-1,55	43. 18. 43,73	May 16	-8,34	58. 6. 38,10	June 14	-1,72	81. 19. 4,93
			8	-1,25	44,24	17	-8,08	39,62			
Σ 1977.			13	+0,22	45,73	25	-5,94	39,25	h^1 Draconis.		
April 27	-13,50	64. 3. 35,75	14	+0,50	43,76	July 20	+7,44	38,20			
May 13	-9,99	39,49	22	+2,71	41,54	24	+8,12	38,20	May 18	-7,42	24. 37. 36,47
Σ 1985.			29	+4,52	42,68	ζ Herculis R.			June 7	-0,66	36,32
			Antares.			May 16	-8,34	58. 6. 39,68	13	+1,33	35,94
May 17	-9,82	91. 42. 3,16	July 24	-8,18	116. 4. 47,77	17	-8,08	37,90	15	+1,98	34,18
June 29	-5,65	1,90	Antares R.			25	-5,94	38,53	18	+2,96	34,60
Piazzi XV. 220.			July 24			July 20	+7,44	40,47	22	+4,23	34,71
April 27	-11,91	86. 8. 19,67	July 24	-8,18	116. 4. 49,44	24	+8,12	39,10	July 15	+10,69	34,99
June 7	-6,94	20,34	22 Scorpii.			Σ 2089.			20	+11,86	36,83
β^1 Scorpii.			June 7	-7,19	114. 45. 56,52	June 15	-0,90	64. 33. 41,18	May 18	-7,42	24. 37. 32,82
May 2	-8,89	109. 22. 21,61	July 16	-7,73	56,10	g Draconis.			June 7	-0,66	33,03
31	-9,15	22,22	η Draconis.			June 8	-0,17	25. 6. 52,95	13	+1,33	30,38
July 24	-8,45	22,10	May 16	-7,66	28. 7. 52,84	g Draconis R.			15	+1,98	33,93
Σ 2007.			17	-7,33	53,86	June 8	-0,17	25. 6. 51,48	18	+2,96	35,19
April 27	-12,41	76. 15. 4,66	25	-4,69	53,33	Σ 2104.			22	+4,23	33,18
June 7	-5,27	4,39	July 20	+10,83	54,40	June 10	-1,19	53. 48. 6,12	July 15	+10,69	33,92
θ Draconis.			29	+12,36	52,96	52 Herculis.			20	+11,86	31,96
June 8	-0,14	31. 0. 59,52	η Draconis R.			May 15	-8,64	43. 44. 30,99	μ Draconis. <i>sp.</i>		
13	+1,36	59,60	May 16	-7,66	28. 7. 52,31	16	-8,33	29,88	June 14	+0,63	35. 19. 19,85
14	+1,64	59,27	17	-7,33	49,82	18	-7,73	31,17	μ Draconis. <i>nf.</i>		
29	+5,64	59,00	25	-4,69	51,90	June 7	-1,48	29,29	July 15	+10,20	35. 19. 17,91
θ Draconis R.			July 20	+10,83	51,94	22	+3,01	29,48	Σ 2133.		
June 8	-0,14	31. 0. 59,36	29	+12,36	53,29	July 15	+8,96	30,31	June 13	+0,63	40. 2. 28,30
13	+1,36	57,62	λ Ophiuchi.			20	+10,03	29,60	α Herculis.		
14	+1,64	58,64	June 8	-5,01	87. 40. 12,62	27	+11,37	30,22	June 15	-0,51	75. 25. 36,39
29	+5,64	57,15	Σ 3105.			29	+11,72	30,46	18	+0,12	35,13
κ Herculis.			June 13	-5,26	96. 40. 54,15	Aug. 31	+14,93	30,47	22	+0,90	37,43
June 10	-4,18	72. 31. 58,54	Σ_s 313.			52 Herculis R.			July 16	+5,22	36,53
τ Herculis.			July 15	+7,62	49. 33. 16,30	May 15	-8,64	43. 44. 28,55	α Herculis R.		
June 7	-1,55	43. 18. 42,69	ζ Ophiuchi.			16	-8,33	31,63	June 15	-0,51	75. 25. 38,41
8	-1,25	43,12	April 30	-7,76	100. 14. 44,31	18	-7,73	28,88	18	+0,12	38,67
13	+0,22	44,19	June 10	-5,46	43,31	June 7	-1,48	30,19	22	+0,90	38,73
14	+0,50	44,49	ζ Ophiuchi R.			22	+3,01	30,70	July 16	+5,22	38,45
22	+2,71	42,18	April 30	-7,76	100. 14. 43,64	July 15	+8,96	30,99	δ Herculis.		
29	+4,52	44,34	June 10	-5,46	45,24	20	+10,03	30,39	July 31	+9,71	64. 58. 20,40
						27	+11,37	30,80	Piazzi XVII. 58.		
						29	+11,72	30,29	June 14	+1,19	33. 41. 19,73
						Aug. 31	+14,93	30,98			
						B. xvi. 878.					
						May 25	-5,51	86. 42. 56,74			
						July 16	+1,43	55,31			

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Σ 2157.			ι Herculis R.			η Serpentis R.			α Lyrae R. continued.		
July 17	+ 6,28	73.23.25,52	April 30	- 12,67	43.54.27,10	July 23	+ 7,25	92.56.0,44	June 27	+ 5,63	51.21.28,20
ρ Herculis.			May 15	- 8,55	25,46	λ Sagittarii.			July 23	+ 13,33	27,71
June 18	+ 1,74	52.42.23,52	γ Ophiuchi.			δ Ursæ Minoris.			24	+ 13,60	27,72
July 16	+ 9,19	23,59	July 16	+ 5,36	87.13.42,96	July 27	+ 4,65	115.30.6,06	27	+ 14,41	28,59
σ Ophiuchi.			γ Ophiuchi R.			Σ 2369.			Aug. 13	+ 18,35	29,46
April 30	- 7,27	85.43.8,37	July 16	+ 5,36	87.13.42,82	July 16	+ 10,95	3.24.22,02	Sept. 19	+ 14,96	87.31.38,02
σ Ophiuchi R.			Σ 2224.			22	+ 12,75	20,77	Σ 2400.		
April 30	- 7,27	85.43.7,54	May 15	- 8,08	50.36.52,67	23	+ 13,05	22,10	Sept. 19	+ 19,38	73.55.0,80
Σ 2166.			Piazzi XVII. 260.			24	+ 13,35	23,09	β Lyrae.		
July 17	+ 5,70	78.28.27,07	July 29	+ 8,08	82.43.6,09	Aug. 10	+ 17,75	23,66	Aug. 20	+ 19,68	56.48.50,59
29	+ 7,38	29,62	ξ Draconis.			20	+ 19,85	21,72	β Lyrae R.		
31	+ 7,63	28,62	June 15	+ 1,36	33.6.2,93	29	+ 21,35	21,64	Aug. 20	+ 19,68	56.48.52,32
α Ophiuchi.			ξ Draconis R.			31	+ 21,75	21,48	ν ¹ Sagittarii.		
July 16	+ 6,12	77.19.16,70	June 15	+ 1,36	33.6.1,54	δ Ursæ Minoris SP.			June 29	+ 7,86	112.55.49,69
Aug. 13	+ 9,80	17,27	τ Ophiuchi.			Feb. 16	- 12,65	3.24.22,91	Sept. 19	+ 7,14	49,37
30	+ 11,20	16,71	July 29	+ 5,75	98.10.27,99	16	- 12,65	22,00	Σ 2415.		
α Ophiuchi R.			Σ ₂ 341.			20	- 13,45	20,72	Aug. 17	+ 17,51	69.34.36,05
July 16	+ 6,12	77.19.16,53	July 16	+ 9,08	68.33.40,67	δ Ursæ Minoris SP. R.			Sept. 27	+ 21,26	35,73
Aug. 13	+ 9,80	17,52	24	+ 10,70	40,96	Feb. 16	- 12,65	3.24.21,21	ο Draconis.		
30	+ 11,20	17,46	Σ 2286.			16	- 12,65	22,82	June 27	+ 5,13	30.48.3,64
ν ¹ Draconis.			July 12	+ 6,31	89.28.49,28	20	- 13,45	23,62	July 22	+ 13,68	2,18
June 14	+ 1,10	34.42.26,62	μ ¹ Sagittarii.			α Lyrae.			23	+ 13,99	3,55
ν ¹ Draconis R.			July 27	+ 4,04	111.5.34,67	Jan. 27	- 6,77	51.21.28,13	Aug. 13	+ 20,11	1,92
June 7	- 1,26	34.42.25,34	μ ¹ Sagittarii R.			Feb. 8	- 9,77	28,70	30	+ 23,93	3,62
14	+ 1,10	24,65	July 27	+ 4,04	111.5.38,68	Mar. 11	- 14,75	28,69	ο Draconis R.		
18	+ 2,43	23,20	Σ 2303.			June 24	+ 4,70	27,39	June 27	+ 5,13	30.48.0,95
ν ² Draconis.			July 16	+ 6,45	98.2.26,15	27	+ 5,63	29,01	July 22	+ 13,68	2,95
June 7	- 1,26	34.43.6,59	η Serpentis.			July 23	+ 13,33	27,17	23	+ 13,99	1,74
18	+ 2,43	6,99	July 23	+ 7,25	92.56.1,89	24	+ 13,60	26,96	Aug. 13	+ 20,11	1,21
Σ ₂ 333.			Σ 2157.			27	+ 14,41	27,51	30	+ 23,93	1,31
July 17	+ 6,11	79.19.24,23	ρ Herculis.			Aug. 13	+ 18,35	27,10	ο Sagittarii.		
29	+ 7,82	27,00	June 18	+ 1,74	52.42.23,52	Sept. 19	+ 23,35	27,94	June 29	+ 8,92	111.57.49,69
ι Herculis.			July 16	+ 9,19	23,59	Nov. 26	+ 16,75	28,13	Sept. 19	+ 8,46	49,64
April 30	- 12,67	43.54.27,94	γ Ophiuchi R.			Dec. 4	+ 14,75	28,66	H. C. 35690.		
May 15	- 8,55	28,11	July 16	+ 5,36	87.13.42,96	α Lyrae R.			Sept. 27	+ 22,71	66.52.24,18
Σ 2166.			Σ 2224.			Jan. 27	- 6,77	51.21.28,83			
July 17	+ 5,70	78.28.27,07	May 15	- 8,08	50.36.52,67	Feb. 8	- 9,77	29,64			
29	+ 7,38	29,62	ξ Draconis.			Mar. 11	- 14,75	30,52			
31	+ 7,63	28,62	June 15	+ 1,36	33.6.2,93	June 24	+ 4,70	29,98			
α Ophiuchi.			τ Ophiuchi.								
July 16	+ 6,12	77.19.16,70	July 29	+ 5,75	98.10.27,99						
Aug. 13	+ 9,80	17,27	Σ ₂ 341.								
30	+ 11,20	16,71	July 16	+ 9,08	68.33.40,67						
α Ophiuchi R.			24	+ 10,70	40,96						
July 16	+ 6,12	77.19.16,53	Σ 2286.								
Aug. 13	+ 9,80	17,52	July 12	+ 6,31	89.28.49,28						
30	+ 11,20	17,46	μ ¹ Sagittarii.								
ν ¹ Draconis.			July 27	+ 4,04	111.5.34,67						
June 14	+ 1,10	34.42.26,62	μ ¹ Sagittarii R.								
ν ¹ Draconis R.			July 27	+ 4,04	111.5.38,68						
June 7	- 1,26	34.42.25,34	Σ 2303.								
14	+ 1,10	24,65	July 16	+ 6,45	98.2.26,15						
18	+ 2,43	23,20	η Serpentis.								
Σ ₂ 333.			July 23	+ 7,25	92.56.1,89						
July 17	+ 6,11	79.19.24,23	Σ 2157.								
29	+ 7,82	27,00	ρ Herculis.								
ι Herculis.			June 18	+ 1,74	52.42.23,52						
April 30	- 12,67	43.54.27,94	July 16	+ 9,19	23,59						
May 15	- 8,55	28,11	γ Ophiuchi R.								
Σ 2166.			July 16	+ 5,36	87.13.42,96						
July 17	+ 5,70	78.28.27,07	Σ 2224.								
29	+ 7,38	29,62	May 15	- 8,08	50.36.52,67						
31	+ 7,63	28,62	ξ Draconis.								
α Ophiuchi.			June 15	+ 1,36	33.6.2,93						
July 16	+ 6,12	77.19.16,70	τ Ophiuchi.								
Aug. 13	+ 9,80	17,27	July 29	+ 5,75	98.10.27,99						
30	+ 11,20	16,71	Σ ₂ 341.								
α Ophiuchi R.			July 16	+ 9,08	68.33.40,67						
July 16	+ 6,12	77.19.16,53	24	+ 10,70	40,96						
Aug. 13	+ 9,80	17,52	Σ 2286.								
30	+ 11,20	17,46	July 12	+ 6,31	89.28.49,28						
ν ¹ Draconis.			μ ¹ Sagittarii.								
June 14	+ 1,10	34.42.26,62	July 27	+ 4,04	111.5.34,67						
ν ¹ Draconis R.			μ ¹ Sagittarii R.								
June 7	- 1,26	34.42.25,34	July 27	+ 4,04	111.5.38,68						
14	+ 1,10	24,65	Σ 2303.								
18	+ 2,43	23,20	July 16	+ 6,45	98.2.26,15						
Σ ₂ 333.			η Serpentis.								
July 17	+ 6,11	79.19.24,23	July 23	+ 7,25	92.56.1,89						
29	+ 7,82	27,00	Σ 2157.								
ι Herculis.			ρ Herculis.								
April 30	- 12,67	43.54.27,94	June 18	+ 1,74	52.42.23,52						
May 15	- 8,55	28,11	July 16	+ 9,19	23,59						
Σ 2166.			γ Ophiuchi R.								
July 17	+ 5,70	78.28.27,07	July 16	+ 5,36	87.13.42,96						
29	+ 7,38	29,62	Σ 2224.								
31	+ 7,63	28,62	May 15	- 8,08	50.36.52,67						
α Ophiuchi.			ξ Draconis.								
July 16	+ 6,12	77.19.16,70	June 15	+ 1,36	33.6.2,93						
Aug. 13	+ 9,80	17,27	τ Ophiuchi.								
30	+ 11,20	16,71	July 29	+ 5,75	98.10.27,99						
α Ophiuchi R.			Σ ₂ 341.								
July 16	+ 6,12	77.19.16,53	July 16	+ 9,08	68.33.40,67						
Aug. 13	+ 9,80	17,52	24	+ 10,70	40,96						
30	+ 11,20	17,46	Σ 2286.								
ν ¹ Draconis.			July 12	+ 6,31	89.28.49,28						
June 14	+ 1,10	34.42.26,62	μ ¹ Sagittarii.								
ν ¹ Draconis R.			July 27	+ 4,04	111.5.34,67						
June 7	- 1,26	34.42.25,34	μ ¹ Sagittarii R.								
14	+ 1,10	24,65	July 27	+ 4,04	111.5.38,68						
18	+ 2,43	23,20	Σ 2303.								
Σ ₂ 333.			July 16	+ 6,45	98.2.26,15						
July 17	+ 6,11	79.19.24,23	η Serpentis.								
29	+ 7,82	27,00	July 23	+ 7,25	92.56.1,89						
ι Herculis.			Σ 2157.								
April 30	- 12,67	43.54.27,94	ρ Herculis.								
May 15	- 8,55	28,11	June 18	+ 1,74	52.42.23,52						
Σ 2166.			July 16	+ 9,19	23,59						
July 17	+ 5,70	78.28.27,07	γ Ophiuchi R.								
29	+ 7,38	29,62	July 16	+ 5,36	87.13.42,96						
31	+ 7,63	28,62	Σ 2224.								
α Ophiuchi.			May 15	- 8,08	50.36.52,67						
July 16	+ 6,12	77.19.16,70	ξ Draconis.								
Aug. 13	+ 9,80	17,27	June 15	+ 1,36	33.6.2,93						
30	+ 11,20	16,71	τ Ophiuchi.								
α Ophiuchi R.			July 29	+ 5,75	98.10.27,99						
July 16	+ 6,12	77.19.16,53	Σ ₂ 341.								
Aug. 13	+ 9,80	17,52	July 16	+ 9,08	68.33.40,67						
30	+ 11,20	17,46	24	+ 10,70	40,96						
ν ¹ Draconis.			Σ 2286.								
June 14	+ 1,10	34.42.26,62	July 12	+ 6,31	89.28.49,28						
ν ¹ Draconis R.			μ ¹ Sagittarii.								
June 7	- 1,26	34.42.25,34	July 27	+ 4,04	111.5.34,67						
14	+ 1,10	24,65	μ ¹ Sagittarii R.								
18	+ 2,43	23,20	July 27	+ 4,04	111.5.38,68						
Σ ₂ 333.			Σ 2303.								
July 17	+ 6,11	79.19.24,23	July 16	+ 6,45	98.2.26,15						
29	+ 7,82	27,00	η Serpentis.								
ι Herculis.			July 23	+ 7,25	92.56.1,89						
April 30	- 12,67	43.54.27,94	Σ 2157.								
May 15	- 8,55	28,11	ρ Herculis.								
Σ 2166.			June 18	+ 1,74	52.42.23,52						
July 17	+ 5,70	78.28.27,07	July 16	+ 9,19	23,59						
29	+ 7,38	29,62	γ Ophiuchi R.								
31	+ 7,63	28,62	July 16	+ 5,36	87.13.42,96						
α Ophiuchi.			Σ 2224.								
July 16	+ 6,12	77.19.16,70	May 15	- 8,08	50.36.52,67						
Aug. 13	+ 9,80	17,27	ξ Draconis.								
30	+ 11,20	16,71	June 15	+ 1,36	33.6.2,93						
α Ophiuchi R.			τ Ophiuchi.								
July 16	+ 6,12	77.19.16,53	July 29	+ 5,75	98.10.27,99						
Aug. 13	+ 9,80	17,52	Σ ₂ 341.								
30	+ 11,20	17,46	July 16	+ 9,08	68.33.40,67						
ν ¹ Draconis.			24	+ 10,70	40,96						
June											

Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.
	"	0	"	"	0	"	"	0	"	"	0
Σ 2445.			B.A.C. 6590.			θ Cygni.			* R. 19 ^h . 52 ^m . 19 ^s .		
Sept. 27	+22,77	66.54.0,72	Sept. 19	+12,01	105.48.6,83	Aug. 7	+19,04	40.8.13,91	Aug. 31	+24,75	57.8.18,09
			25	+11,31	6,12	20	+22,70	13,68	Sept. 6	+25,84	16,71
ζ Aquilæ.			26	+11,30	9,24	θ Cygni R.			18	+27,66	18,37
Sept. 5	+19,10	76.21.49,72	27	+11,29	7,00	Σ 2606.					
ζ Aquilæ R.			28	+11,28	6,99	Aug. 7	+19,04	40.8.15,01	Aug. 31	+24,76	57.8.38,04
Sept. 5	+19,10	76.21.49,96	30	+11,24	8,15	20	+22,70	11,95	Sept. 6	+25,85	38,19
B.A.C. 6530.			B.A.C. 6603.			Σ 2556.			18	+27,67	39,45
June 27	+5,36	37.57.46,72	Aug. 7	+18,77	40.12.6,39	Aug. 10	+18,73	68.5.50,68	Σ 2607.		
July 22	+13,80	47,31	Σ 2499.			12	+19,14	50,16	Aug. 7	+19,31	48.9.25,57
17 Lyræ.			Aug. 17	+19,03	68.19.53,54	17	+20,09	49,96	Σ 2611. sp.		
Aug. 17	+19,85	57.44.24,49	29	+20,91	54,31	e ^s Sagittarii.					
30	+22,19	25,55	30	+21,05	54,20	July 27	+13,66	106.29.1,71	Aug. 29	+25,34	43.3.34,36
31	+22,34	24,62	ρ ¹ Sagittarii.			Σ 2576.			Σ 2626.		
Σ 2466.			July 27	+11,49	108.8.6,13	Sept. 6	+25,35	56.45.15,39	July 20	+14,38	59.53.43,42
Aug. 31	+21,93	60.26.29,45	ρ ^s Sagittarii.			18	+27,05	16,73	Aug. 20	+22,41	40,14
Sept. 6	+22,76	28,49	Sept. 19	+11,33	108.35.30,61	24	+27,69	16,48	Sept. 18	+27,52	43,00
19	+24,06	31,10	25	+11,14	29,02	δ Cygni.			ρ Draconis.		
* R. 19 ^h . 5 ^m . 36 ^s .			* R. 19 ^h . 13 ^m . 26 ^s .			Sept. 28	+29,77	45.14.47,77	Aug. 10	+19,41	22.34.15,47
Sept. 25	+22,28	71.2.57,72	Sept. 25	+10,49	110.55.42,49	δ Cygni R.			ρ Draconis R.		
27	+22,35	56,58	26	+10,46	44,96	Sept. 28	+29,77	45.14.49,10	Aug. 10	+19,41	22.34.15,34
Σ 2482.			27	+10,44	43,93	57 Sagittarii.			Σ 2643.		
Sept. 25	+22,32	71.7.12,52	28	+10,42	44,62	Aug. 10	+14,44	109.26.8,96	Aug. 29	+19,61	93.27.29,50
26	+22,35	14,54	30	+10,39	44,87	31	+14,19	8,20	Sept. 2	+19,82	29,99
Σ 2484.			Σ 2504.			Σ 2596.			α ^s Capricorni.		
July 27	+14,47	71.11.54,93	Aug. 20	+19,25	71.8.42,18	Aug. 7	+18,26	75.6.34,56	July 29	+17,12	103.1.24,33
53 Draconis.			Sept. 6	+21,48	42,53	b Sagittarii.			Aug. 31	+18,05	24,69
July 22	+13,76	33.24.17,55	18	+22,52	43,30	Aug. 20	+13,18	117.34.38,74	Sept. 24	+17,88	26,35
Sept. 6	+25,99	15,91	Σ 2525.			Sept. 6	+12,26	37,77	α ^s Capricorni R.		
53 Draconis R.			Aug. 10	+18,64	62.59.22,41	β Aquilæ.			July 29	+17,12	103.1.22,28
July 22	+13,76	33.24.17,23	17	+20,08	23,21	Aug. 29	+19,84	83.58.40,63	Aug. 31	+18,05	24,47
Sept. 6	+25,99	16,60	Σ 2533.			β Aquilæ R.			Sept. 24	+17,88	25,94
Σ 2489.			July 27	+13,98	90.45.46,59	Aug. 29	+19,84	83.58.41,32	Σ 2658.		
June 27	+7,84	75.43.35,49	Aug. 7	+15,18	44,96				Sept. 2	+26,79	37.21.15,32
			Σ _s 375.						18	+30,37	16,21
			July 27	+15,32	72.12.32,17						
			e ¹ Sagittarii.								
			Sept. 18	+13,61	106.38.41,54						
			19	+13,61	42,50						
			24	+13,51	41,89						
			25	+13,50	42,84						

Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.
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32 Cygni.			α Cygni continued.			61 ¹ Cygni.			α Cephei continued.		
July 15	+ 11,66	42 . 45 . 43,29	Jan. 20	+ 6,45	45 . 16 . 27,05	Aug. 17	+ 24,77	52 . 0 . 50,73	Aug. 28	+ 24,81	28 . 4 . 27,05
Aug. 7	+ 19,32	43,49	Feb. 5	+ 1,47	26,99	27	+ 27,59	50,38	30	+ 25,45	25,39
10	+ 20,26	43,63	April 9	- 9,40	28,05	28	+ 27,87	51,29	Sept. 6	+ 27,69	24,23
20	+ 23,23	42,96	Aug. 17	+ 22,46	28,21	29	+ 28,13	50,33	18	+ 31,27	26,66
32 Cygni R.			Sept. 24	+ 31,73	26,29	Oct. 4	+ 35,72	49,85	25	+ 33,09	26,10
July 15	+ 11,66	42 . 45 . 43,29	25	+ 31,91	26,53	61 ¹ Cygni R.			30	+ 34,27	26,81
Aug. 7	+ 19,32	43,22	Oct. 11	+ 34,03	26,76	Aug. 17	+ 24,77	52 . 0 . 52,31	Oct. 4	+ 35,15	25,39
10	+ 20,26	44,92	Dec. 20	+ 29,01	26,09	27	+ 27,59	50,46	Dec. 20	+ 36,01	24,69
20	+ 23,23	43,61	α Cygni R.			28	+ 27,87	52,35	α Cephei R.		
* \mathcal{R} . 20 ^h . 11 ^m . 53 ^s .			Jan. 11	+ 8,97	45 . 16 . 28,28	29	+ 28,13	51,30	Jan. 26	+ 9,86	28 . 4 . 25,56
Aug. 29	+ 22,95	76 . 5 . 59,73	15	+ 7,85	26,64	Oct. 4	+ 35,72	51,52	April 9	- 8,48	26,15
Sept. 2	+ 23,45	58,90	18	+ 7,01	27,94	ν Aquarii.			Aug. 27	+ 24,46	25,06
Σ 2671.			20	+ 6,45	27,99	Sept. 24	+ 22,00	101 . 59 . 57,80	28	+ 24,81	25,83
July 22	+ 13,43	35 . 5 . 18,92	Feb. 5	+ 1,47	26,79	25	+ 21,99	58,32	30	+ 25,45	25,16
Sept. 2	+ 26,87	19,84	April 9	- 9,40	27,51	* \mathcal{R} . 21 ^h . 2 ^m . 18 ^s .			Sept. 6	+ 27,69	26,19
18	+ 30,62	21,27	Aug. 17	+ 22,46	28,94	Sept. 6	+ 22,57	100 . 50 . 26,27	18	+ 31,27	24,67
Σ 2681.			Sept. 24	+ 31,73	27,07	10	+ 22,59	26,61	25	+ 33,09	24,76
Aug. 31	+ 26,38	37 . 5 . 0,57	Oct. 11	+ 34,03	28,31	18	+ 22,54	26,35	30	+ 34,27	24,85
Sept. 2	+ 26,92	1,26	Dec. 20	+ 29,01	28,70	19	+ 22,54	28,05	Oct. 4	+ 35,15	25,78
18	+ 30,67	2,64	ϵ Aquarii.			21	+ 22,50	25,82	Dec. 20	+ 36,01	25,31
ρ Capricorni.			July 29	+ 19,32	100 . 3 . 44,56	24	+ 22,46	26,75	β Aquarii.		
Sept. 19	+ 17,27	108 . 19 . 28,96	Sept. 19	+ 21,07	46,26	* \mathcal{R} . 21 ^h . 2 ^m . 22 ^s .			July 29	+ 21,81	96 . 15 . 14,61
25	+ 17,06	28,93	ϵ Aquarii R.			Sept. 10	+ 22,77	99 . 58 . 59,24	Sept. 10	+ 24,67	13,34
26	+ 17,02	28,93	Sept. 19	+ 21,07	100 . 3 . 45,02	18	+ 22,76	59,51	Oct. 2	+ 24,76	13,41
* \mathcal{R} . 20 ^h . 24 ^m . 13 ^s .			η Cephei.			19	+ 22,75	61,88	Dec. 5	+ 22,07	14,79
Sept. 2	+ 26,78	26 . 36 . 54,98	Aug. 29	+ 26,45	28 . 45 . 55,75	Σ 2776.			β Aquarii R.		
ω^2 Cygni.			η Cephei R.			Sept. 10	+ 22,87	100 . 59 . 32,65	Sept. 10	+ 24,67	96 . 15 . 15,71
Aug. 17	+ 22,42	41 . 34 . 12,08	Aug. 29	+ 26,45	28 . 45 . 56,46	18	+ 21,61	32,65	Oct. 2	+ 24,76	13,50
Sept. 27	+ 32,19	12,30	μ Aquarii.			B. XXI. 222.			Dec. 5	+ 22,07	13,94
ω^2 Cygni R.			Aug. 31	+ 21,39	99 . 33 . 52,07	Sept. 19	+ 22,56	102 . 54 . 57,53	β Cephei.		
Aug. 17	+ 22,42	41 . 34 . 13,24	Sept. 10	+ 21,54	50,91	21	+ 22,51	55,93	Aug. 31	+ 24,80	20 . 7 . 24,28
Sept. 27	+ 32,19	13,83	21	+ 21,54	51,64	24	+ 22,43	55,66	Sept. 10	+ 28,21	25,14
ν Capricorni.			Σ 2738. <i>nf</i> .			25	+ 22,41	56,89	18	+ 30,73	24,90
Sept. 21	+ 18,04	108 . 41 . 0,04	Sept. 6	+ 26,02	74 . 9 . 47,07	26	+ 22,38	55,63	β Cephei R.		
α Cygni.			θ Capricorni.			27	+ 22,34	55,86	Aug. 31	+ 24,80	20 . 7 . 22,17
Jan. 11	+ 8,97	45 . 16 . 26,45	Sept. 6	+ 20,84	107 . 50 . 55,91	ι Capricorni.			Sept. 10	+ 28,21	24,02
15	+ 7,85	27,29	10	+ 20,70	53,67	Sept. 10	+ 22,02	107 . 29 . 40,41	18	+ 30,73	22,96
18	+ 7,01	26,19	Σ 2757.			18	+ 21,71	41,65	ξ Aquarii.		
Sept. 6			Sept. 6	+ 28,21	38 . 13 . 11,81	19	+ 21,66	42,77	Aug. 27	+ 24,27	98 . 33 . 1,07
			α Cephei.			ϵ Pegasi.			28	+ 24,31	1,14
			Jan. 26	+ 9,86	28 . 4 . 25,49	Oct. 2	+ 29,09	80 . 50 . 13,91	ϵ Pegasi R.		
			April 9	- 8,48	25,84	ϵ Pegasi R.			Oct. 2	+ 29,09	80 . 50 . 14,00
			Aug. 27	+ 24,46	25,60						

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1844.
	"	0 . . "		"	0 . . "		"	0 . . "		"	0 . . "
λ Capricorni.			α Aquarii.			γ Aquarii.			* \mathcal{R} . 22 ^h . 36 ^m . 2 ^s .		
Aug. 27	+ 24,50	102. 4. 55,88	Oct. 7	+ 27,67	91. 4. 30,78	Sept. 24	+ 27,84	92. 10. 16,03	Sept. 30	+ 32,65	24. 15. 39,42
Sept. 10	+ 24,56	55,12	26	+ 27,39	27,68				Oct. 2	+ 33,28	38,54
			Dec. 5	+ 25,34	30,96	Σ 2902.			τ^1 Aquarii.		
ν Cephei.			α Aquarii R.			Sept. 27	+ 32,87	45. 26. 16,37	Aug. 27	+ 27,43	104. 52. 35,43
Sept. 25	+ 33,00	29. 35. 51,16	Oct. 7	+ 27,67	91. 4. 29,57	28	+ 33,11	20,22	Sept. 26	+ 26,64	36,89
ν Cephei R.			26	+ 27,39	27,29	B. XXII. 425.			27	+ 26,57	35,04
Sept. 25	+ 33,00	29. 35. 49,58	Dec. 5	+ 25,34	30,72				3 Piscium.		
π^2 Cygni.			ι Aquarii.			Oct. 2	+ 31,07	75. 39. 39,83	Sept. 28	+ 29,12	90. 39. 1,70
Aug. 28	+ 25,10	41. 24. 35,47	Aug. 28	+ 25,48	104. 37. 25,09	7	+ 31,44	40,08	α Pegasi.		
30	+ 25,73	37,48	ι Aquarii R.			Σ 2905.			Nov. 9	+ 32,93	75. 37. 56,90
Sept. 24	+ 32,72	37,03	Aug. 28	+ 25,48	104. 37. 26,34	Oct. 2	+ 31,07	75. 38. 23,96	α Pegasi R.		
30	+ 34,10	37,05	Σ 2861.			7	+ 31,44	23,71	Nov. 9	+ 32,93	75. 37. 58,42
π^2 Cygni R.			Sept. 21	+ 30,27	69. 57. 11,96	ζ Aquarii.			π Cephei.		
Aug. 28	+ 25,10	41. 24. 36,69	24	+ 30,70	9,61	Oct. 22	+ 28,29	90. 49. 0,68	Sept. 2	+ 20,25	15. 27. 19,14
30	+ 25,73	37,15	Σ 2878.			ζ Aquarii R.			π Cephei R.		
Sept. 30	+ 34,10	35,61	Aug. 27	+ 26,30	82. 47. 40,68	Oct. 22	+ 28,29	90. 48. 59,24	Sept. 2	+ 20,25	15. 27. 18,77
* \mathcal{R} . 21 ^h . 43 ^m . 39 ^s .			Sept. 10	+ 27,94	40,56	δ Cephei.			γ Piscium.		
Sept. 10	+ 28,31	71. 28. 44,54	Σ 2882.			Sept. 26	+ 32,36	32. 22. 55,77	Sept. 24	+ 29,49	87. 34. 8,22
21	+ 29,88	44,57	Sept. 24	+ 32,08	53. 1. 34,46	28	+ 32,94	54,09	25	+ 29,53	7,23
24	+ 30,25	41,19	θ Aquarii.			δ Cephei R.			8 Andromedæ.		
* \mathcal{R} . 21 ^h . 44 ^m . 2 ^s .			Sept. 25	+ 26,55	98. 33. 25,51	Sept. 26	+ 32,36	32. 22. 54,19	Aug. 27	+ 21,40	41. 50. 8,85
Sept. 10	+ 28,32	71. 27. 31,83	θ Aquarii R.			28	+ 32,94	54,78	Sept. 27	+ 30,98	9,27
Σ 2834.			Sept. 25	+ 26,55	98. 33. 18,73	Σ 2916.			Oct. 2	+ 32,35	9,95
Sept. 10	+ 28,31	71. 25. 14,33	Σ 2889.			Sept. 27	+ 32,94	49. 34. 48,85	3	+ 32,60	9,12
21	+ 29,90	15,69	Sept. 24	+ 31,31	64. 30. 7,94	η Aquarii.			17	+ 35,98	9,89
μ Capricorni.			ϵ Cephei.			Aug. 27	+ 26,87	90. 55. 10,66	26	+ 37,78	9,93
Aug. 27	+ 24,74	104. 16. 58,49	Dec. 5	+ 41,48	33. 43. 58,48	28	+ 26,95	9,93	Nov. 21	+ 41,07	9,46
Sept. 26	+ 24,09	58,78	ϵ Cephei R.			Sept. 24	+ 28,45	9,07	8 Andromedæ R.		
Σ 2848.			Dec. 5	+ 41,48	33. 43. 57,87	Sept. 26	+ 27,92	95. 1. 50,58	Aug. 27	+ 21,40	41. 50. 9,24
Aug. 28	+ 26,01	84. 47. 59,83	κ Aquarii.			27	+ 27,92	49,56	Sept. 27	+ 30,98	10,54
Sept. 21	+ 28,17	60,47							Oct. 2	+ 32,35	9,85
25	+ 28,42	59,36							3	+ 32,60	9,61
30 Aquarii.									17	+ 35,98	8,68
Aug. 27	+ 25,65	97. 16. 23,86							26	+ 37,78	8,88
									Nov. 21	+ 41,07	9,09

CATALOGUE of the CONCLUDED MEAN NORTH POLAR DISTANCES, JAN. 1, 1844;
with the ANNUAL VARIATIONS.

(The N.P.D. have been corrected for the Discordance of Zenith Points, and the Error of Assumed
Co-latitude, in the manner explained in the Introduction.)

Name of Star.	Number of Obser- vations.	Approximate Mean R.A. Jan. 1, 1844.	Mean N.P.D. Jan. 1, 1844.	Annual Variation.	Name of Star.	Number of Obser- vations.	Approximate Mean R.A. Jan. 1, 1844.	Mean N.P.D. Jan. 1, 1844.	Annual Variation.
		<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>			<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>
H. C. 47310.....	3	0. 0. 1	53. 35. 33.53	-20,055	4 Arietis.....	3	1. 39. 44	73. 49. 25.06	-18,186
α Andromedæ.....	6	0. 0. 20	61. 46. 14.60	-20,055	B.A.C. 549.....	3	1. 39. 55	73. 45. 34.88	-18,179
α Andromedæ R....	6		15.79		B. 1. 736.....	1	1. 40. 29	83. 5. 40.54	-18,159
β Cassiopeia.....	2	0. 0. 54	31. 42. 40.12	-20,060	Σ 179. <i>np.</i>	2	1. 44. 0	53. 26. 55.76	-18,026
γ Pegasi.....	2	0. 5. 13	75. 41. 1.86	-20,049	β Arietis.....	5	1. 46. 2	69. 57. 24.99	-17,947
γ Pegasi R.....	2		0.94		α Arietis.....	2	1. 48. 50	72. 56. 47.81	-17,836
δ Piscium.....	3	0. 12. 35	82. 40. 34.21	-20,025	Σ 194.....	3	1. 50. 34	65. 55. 55.87	-17,766
α Cassiopeia.....	9	0. 31. 41	34. 19. 8.62	-19,864	α Piscium. <i>sf.</i>	2	1. 53. 59	87. 59. 32.44	-17,626
α Cassiopeia R....	10		8.75		γ Andromedæ. <i>sp.</i>	4	1. 54. 21	48. 25. 19.02	-17,610
55 Piscium. <i>nf.</i>	2	0. 31. 43	69. 25. 6.52	-19,864	γ Andromedæ R....	4		19.68	
β Ceti.....	3	0. 35. 45	108. 50. 38.18	-19,811	B. 1. 988.....	1	1. 54. 57	79. 5. 58.66	-17,585
β Ceti R.....	3		37.76		B.A.C. 632.....	3	1. 55. 10	72. 29. 57.31	-17,576
ζ Andromedæ.....	1	0. 39. 5	66. 34. 57.41	-19,765	α Arietis.....	1	1. 58. 24	67. 16. 40.37	-17,437
ζ Andromedæ R....	1		56.15		α Arietis R.....	1		40.49	
δ Piscium.....	2	0. 40. 36	83. 15. 53.67	-19,742	B.A.C. 650.....	2	1. 59. 13	72. 43. 0.12	-17,403
i Piscium. <i>np.</i>	2	0. 41. 31	63. 8. 24.52	-19,727	Σ 221. <i>np.</i>	1	2. 1. 4	70. 23. 38.26	-17,322
Piazzi O. 208.....	2	0. 43. 25	78. 3. 51.74	-19,697	θ Arietis.....	3	2. 9. 28	70. 49. 24.57	-16,940
20 Ceti.....	2	0. 45. 2	91. 59. 32.19	-19,669	i Persei.....	6	2. 11. 31	34. 52. 20.73	-16,843
γ Cassiopeia.....	2	0. 47. 20	30. 7. 45.93	-19,629	i Persei R.....	6		20.39	
γ Cassiopeia R....	2		45.68		27 Arietis.....	6	2. 22. 16	72. 59. 20.95	-16,314
ϕ^3 Ceti.....	4	0. 48. 12	102. 6. 44.72	-19,614	29 Arietis.....	2	2. 24. 22	75. 39. 34.11	-16,206
* (Mag. 8, 9).....	3	0. 49. 47	103. 5. 26.23	-19,584	30 Arietis. <i>sf.</i>	2	2. 27. 59	66. 2. 7.17	-16,018
ϕ^4 Ceti.....	1	0. 50. 55	102. 13. 24.10	-19,563	ν Arietis.....	1	2. 29. 58	68. 43. 0.92	-15,913
B. o. 962.....	4	0. 54. 28	101. 30. 16.64	-19,492	H. C. 4925.....	4	2. 31. 31	73. 56. 48.57	-15,830
ϵ Piscium.....	5	0. 54. 51	82. 57. 2.89	-19,484	μ Arietis.....	3	2. 33. 35	70. 39. 24.39	-15,719
μ Cassiopeia.....	2	0. 57. 58	35. 50. 50.25	-19,417	38 Arietis.....	2	2. 36. 28	78. 12. 51.80	-15,560
* (Mag. 9).....	1	0. 58. 7	99. 29. 49.42	-19,414	B.A.C. 845.....	3	2. 36. 31	80. 32. 52.68	-15,558
28 Ceti.....	2	0. 58. 16	100. 40. 36.41	-19,411	39 Arietis.....	2	2. 38. 38	61. 24. 16.83	-15,540
31 Cassiopeia.....	3	1. 0. 11	22. 3. 13.34	-19,368	π Arietis. <i>np.</i>	4	2. 40. 36	73. 11. 17.35	-15,330
η Ceti.....	4	1. 0. 45	101. 0. 38.17	-19,355	ϵ Arietis.....	1	2. 50. 18	69. 17. 14.38	-14,769
Polaris. <i>nf.</i>	27	1. 3. 18	1. 31. 21.04	-19,293	α Ceti.....	2	2. 54. 8	86. 31. 33.61	-14,538
Polaris R.....	27		20.74		α Ceti R.....	1		34.06	
Polaris SP.....	17		1. 31. 20.99		ζ Arietis.....	2	3. 5. 57	69. 32. 16.85	-13,808
Polaris SP. R.....	17		20.51		α Persei.....	11	3. 13. 13	40. 41. 58.03	-13,338
37 Ceti*.....	1	1. 6. 33	98. 45. 46.10	-19,216	α Persei R.....	8		57.82	
B. 1. 186.....	5	1. 11. 44	96. 8. 54.65	-19,081	ψ Arietis.....	3	3. 15. 7	65. 49. 58.30	-13,216
ξ Andromedæ.....	1	1. 13. 11	45. 17. 25.66	-19,041	ψ Persei.....	2	3. 25. 26	42. 19. 55.89	-12,524
ξ Andromedæ R....	1		26.02		ϵ Eridani.....	1	3. 25. 35	99. 59. 22.59	-12,513
θ Ceti.....	1	1. 16. 14	98. 59. 24.68	-18,955	τ^5 Eridani.....	3	3. 26. 54	112. 9. 35.02	-12,423
θ Ceti R.....	1		24.63		τ^5 Eridani R.....	2		35.68	
H. C. 2553.....	1	1. 16. 24	93. 17. 15.78	-18,951	δ Persei.....	2	3. 31. 51	42. 43. 2.24	-12,080
η Piscium.....	2	1. 23. 9	75. 27. 36.19	-18,750	δ Persei R.....	2		1.30	
η Piscium R.....	1		37.07		ν Persei.....	2	3. 34. 37	47. 55. 10.98	-11,886
101 Piscium.....	1	1. 27. 26	76. 8. 17.43	-18,614	ϵ Persei. <i>sp.</i>	3	3. 47. 24	50. 26. 49.02	-10,967
B. 1. 497.....	1	1. 28. 22	87. 0. 45.42	-18,583	ϵ Persei R.....	1		48.89	
π Piscium.....	3	1. 28. 50	78. 39. 31.91	-18,567	γ Eridani.....	2	3. 50. 45	103. 57. 23.39	-10,718
103 Piscium.....	3	1. 30. 51	74. 10. 5.80	-18,500	γ Eridani R.....	2		22.12	
105 Piscium.....	2	1. 31. 16	74. 23. 16.43	-18,486	Λ^1 Tauri.....	1	3. 55. 29	68. 20. 58.53	-10,368
B. 1. 568.....	1	1. 32. 1	85. 52. 10.90	-18,461	μ Persei.....	3	4. 3. 28	41. 59. 36.44	-9,764
B. 1. 576.....	1	1. 32. 14	83. 42. 17.70	-18,453	μ Persei R.....	3		36.46	
τ Ceti.....	1	1. 36. 49	106. 45. 38.67	-18,292	ω^1 Eridani.....	2	4. 4. 15	97. 14. 54.15	-9,704
τ Ceti R.....	1		39.74		ω^2 Tauri.....	3	4. 8. 8	69. 48. 38.77	-9,405
Σ 162†.....	1	1. 39. 36	42. 52. 57.83	-18,191	γ Tauri.....	1	4. 10. 55	74. 45. 13.92	-9,190

* The *sf* of the two brightest of four.

† The two close stars observed as a single star.

‡ The observation of Jan. 24 has been corrected by +1".66 to reduce it to an observation of the *sf* star.

Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1844.	Mean N.P.D. Jan. 1, 1844.	Annual Variation.	Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1844.	Mean N.P.D. Jan. 1, 1844.	Annual Variation.
		<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>			<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>
δ ¹ Tauri.....	2	4. 13. 57	72. 49. 42,26	- 8,953	ο Ursæ Majoris....	3	8. 17. 15	28. 46. 2,34	+ 11,305
ε Tauri.....	1	4. 19. 31	71. 10. 15,39	- 8,514	ο Ursæ Majoris R..	3		2,03	
Aldebaran.....	7	4. 26. 59	73. 48. 34,89	- 7,916	θ Cancrī.....	3	8. 22. 42	71. 22. 57,08	+ 11,696
Aldebaran R.....	7		35,07		δ Hydræ.....	1	8. 29. 24	83. 45. 21,44	+ 12,167
α Camelopardi....	2	4. 38. 35	23. 55. 54,27	- 6,976	δ Hydræ R.....	1		23,26	
α Camelopardi R...	2		54,58		Σ 1263. <i>sp.</i>	1	8. 34. 51	47. 44. 27,02	+ 12,543
ι Aurigæ.....	1	4. 46. 51	57. 5. 13,78	- 6,293	δ Cancrī.....	6	8. 35. 49	71. 16. 35,36	+ 12,609
ε Aurigæ.....	2	4. 50. 47	46. 24. 51,76	- 5,965	ε Hydræ. <i>nf.</i>	2	8. 38. 31	83. 0. 46,03	+ 12,793
ε Aurigæ R.....	2		51,01		ε Hydræ R.....	2		47,09	
η Aurigæ.....	2	4. 55. 35	48. 59. 0,02	- 5,563	Σ 1281. <i>sf.</i>	1	8. 39. 35	89. 24. 32,20	+ 12,864
η Aurigæ R.....	2		48. 58. 59,75		H. C. 17526.....	1	8. 45. 40	45. 43. 57,04	+ 13,267
Σ 652. <i>nf.</i>	1	5. 3. 43	89. 9. 30,87	- 4,876	ι Ursæ Majoris....	7	8. 48. 30	41. 21. 1,61	+ 13,455
Capella.....	14	5. 5. 11	44. 10. 4,43	- 4,749	ι Ursæ Majoris R..	7		1,13	
Capella R.....	13		4,20		α ² Cancrī.....	3	8. 49. 57	77. 32. 31,75	+ 13,546
Rigel. <i>nf.</i>	4	5. 7. 3	98. 23. 10,79	- 4,591	κ Cancrī.....	2	8. 59. 18	78. 42. 27,84	+ 14,138
Rigel R.....	4		12,31		Σ ₂ 197.....	1	9. 1. 24	86. 25. 41,82	+ 14,268
B. v. 294.....	2	5. 12. 48	85. 41. 4,62	- 4,101	Σ 1318. <i>nf.</i>	1	9. 3. 5	42. 22. 22,55	+ 14,371
B. v. 303.....	5	5. 13. 6	86. 8. 55,62	- 4,076	Σ 1322.....	1	9. 3. 58	72. 50. 16,61	+ 14,425
B.A.C. 1661.....	6	5. 13. 54	86. 35. 11,56	- 4,007	Σ 1324. <i>sf.</i>	1	9. 4. 52	63. 10. 56,53	+ 14,479
m Orionis. <i>sp.</i>	6	5. 14. 38	86. 36. 39,59	- 3,944	Σ 1332. <i>sp.</i>	1	9. 8. 19	65. 41. 47,28	+ 14,687
*(Mag. 9).....	1	5. 15. 21	85. 29. 47,18	- 3,883	Σ ₂ 201.....	1	9. 14. 43	61. 26. 6,80	+ 15,062
B. v. 356.....	1	5. 15. 13	84. 49. 51,13	- 3,894	Σ 1355. <i>np.</i>	1	9. 19. 4	83. 5. 10,87	+ 15,310
β Tauri.....	3	5. 16. 26	61. 31. 50,41	- 3,787	h Ursæ Majoris. <i>sf.</i>	3	9. 19. 10	26. 15. 39,55	+ 15,316
β Tauri R.....	2		51,12		h Ursæ Majoris R..	3		40,71	
A Orionis. <i>nf.</i>	7	5. 22. 26	84. 10. 34,20	- 3,273	α Hydræ.....	3	9. 19. 55	97. 59. 6,78	+ 15,360
B. v. 623.....	4	5. 24. 54	83. 55. 52,73	- 3,060	α Hydræ R.....	3		7,44	
*(Mag. 8, 9).....	1	5. 26. 23	83. 33. 26,31	- 2,931	ξ Leonis.....	4	9. 23. 32	78. 0. 44,72	+ 15,560
ζ Tauri.....	2	5. 28. 19	68. 57. 32,06	- 2,764	Σ ₂ 205.....	1	9. 32. 44	48. 19. 0,79	+ 16,055
B. v. 802.....	4	5. 31. 18	82. 46. 31,19	- 2,505	ο Leonis.....	4	9. 32. 49	79. 24. 3,75	+ 16,060
B. v. 925.....	2	5. 35. 36	82. 38. 51,97	- 2,131	ε Leonis.....	2	9. 36. 59	65. 30. 36,93	+ 16,277
B. v. 1015.....	3	5. 39. 27	82. 6. 2,70	- 1,796	ε Leonis R.....	2		37,55	
31 Camelopardi....	1	5. 41. 0	30. 9. 30,77	- 1,661	υ Ursæ Majoris....	5	9. 39. 51	30. 13. 52,36	+ 16,421
31 Camelopardi R..	1		31,27		υ Ursæ Majoris R..	5		52,87	
α Orionis.....	3	5. 46. 44	82. 37. 38,67	- 1,158	π Leonis.....	7	9. 51. 58	81. 12. 36,40	+ 17,006
α Orionis R.....	3		39,88		π Leonis R.....	3		34,79	
β Aurigæ.....	7	5. 48. 5	45. 4. 32,40	- 1,042	Regulus.....	5	10. 0. 4	77. 16. 22,14	+ 17,372
β Aurigæ R.....	7		33,49		Regulus R.....	5		21,52	
H. C. 11457.....	2	5. 54. 45	80. 50. 34,37	- 0,459	λ Ursæ Majoris....	5	10. 7. 40	46. 18. 32,03	+ 17,694
1 Lyncis.....	5	6. 3. 31	28. 26. 38,27	+ 0,308	λ Ursæ Majoris R..	4		31,34	
1 Lyncis R.....	5		38,19		Σ 1426. <i>sp.</i>	1	10. 12. 22	82. 47. 12,60	+ 17,884
η Geminorum.....	1	6. 5. 28	67. 27. 13,98	+ 0,478	Σ ₂ 217.....	2	10. 18. 27	70. 59. 8,46	+ 18,189
μ Geminorum.....	5	6. 13. 31	67. 24. 44,63	+ 1,185	μ Hydræ.....	1	10. 18. 33	106. 2. 30,26	+ 18,123
β Canis Majoris...	2	6. 15. 50	107. 52. 59,22	+ 1,384	μ Hydræ R.....	1		29,76	
β Canis Majoris R..	2		57,85		Σ ₂ 218.....	1	10. 19. 26	85. 38. 33,07	+ 18,155
γ Geminorum.....	8	6. 28. 42	73. 28. 24,25	+ 2,505	Σ 1439. <i>np.</i>	1	10. 21. 34	68. 23. 57,31	+ 18,231
γ Geminorum R....	6		24,24		ρ Leonis.....	1	10. 24. 36	79. 53. 33,59	+ 18,343
ε Geminorum.....	2	6. 34. 20	64. 43. 14,14	+ 2,993	Σ 1445. <i>np.</i>	1	10. 24. 45	90. 3. 46,81	+ 18,348
15 Lyncis.....	5	6. 43. 45	31. 22. 54,54	+ 3,805	37 Ursæ Majoris...	3	10. 25. 4	32. 6. 58,56	+ 18,360
15 Lyncis R.....	5		54,81		37 Ursæ Majoris R.	3		59,49	
ω Geminorum.....	1	6. 52. 54	65. 34. 3,64	+ 4,588	Σ 1457.....	1	10. 30. 36	83. 27. 24,19	+ 18,549
ζ Geminorum.....	7	6. 54. 51	69. 12. 23,83	+ 4,754	B.A.C. 3649.....	1	10. 31. 32	80. 20. 48,09	+ 18,580
ζ Geminorum R....	5		23,26		42 Leonis Minoris..	4	10. 37. 11	58. 29. 51,16	+ 18,760
Σ 1033.....	1	7. 2. 27	37. 11. 46,44	+ 5,398	42 Leonis Min. R..	4		50,81	
Σ 1037.....	1	7. 3. 6	62. 31. 0,61	+ 5,452	ω Ursæ Majoris....	4	10. 44. 59	45. 58. 51,55	+ 18,991
δ Geminorum. <i>nf.</i> ...	9	7. 10. 48	67. 44. 9,33	+ 6,100	ω Ursæ Majoris R..	4		51,89	
δ Geminorum R....	6		9,15		Σ 1500.....	1	10. 52. 5	92. 38. 15,98	+ 19,181
Castor. <i>nf.</i>	6	7. 24. 38	57. 46. 31,30	+ 7,242	d Leonis.....	2	10. 52. 30	85. 32. 45,34	+ 19,192
Castor R.....	5		31,30		Σ 1501.....	1	10. 53. 45	58. 20. 12,04	+ 19,223
k Geminorum.....	2	7. 24. 42	73. 50. 35,76	+ 7,244	α Ursæ Majoris....	3	10. 54. 3	27. 24. 30,11	+ 19,232
23 Lyncis.....	3	7. 27. 54	32. 34. 9,18	+ 7,505	α Ursæ Majoris R..	3		29,69	
23 Lyncis R.....	3		8,43		ψ Ursæ Majoris....	3	11. 0. 52	44. 39. 22,16	+ 19,391
Procyon.....	1	7. 31. 8	84. 22. 45,42	+ 8,750	ψ Ursæ Majoris R..	3		22,30	
Procyon R.....	1		47,77		φ Leonis.....	1	11. 8. 44	92. 47. 57,47	+ 19,556
Pollux.....	10	7. 35. 46	61. 36. 8,44	+ 8,142	δ Crateris.....	2	11. 11. 33	103. 56. 5,23	+ 19,609
Pollux R.....	10		8,56		δ Crateris R.....	2		5,30	
g Geminorum.....	1	7. 37. 5	71. 6. 51,85	+ 8,244	σ Leonis.....	1	11. 13. 6	83. 6. 58,16	+ 19,637
ζ Cancrī. <i>np.</i>	3	8. 3. 16	71. 53. 13,15	+ 10,274	λ Draconis.....	1	11. 22. 4	19. 48. 34,90	+ 19,781
β Cancrī.....	4	8. 8. 3	80. 20. 17,69	+ 10,631	λ Draconis R.....	1		34,36	
β Cancrī R.....	4		17,16		ε Leonis.....	1	11. 22. 21	92. 8. 35,73	+ 19,786

* The close double-star observed as single.

† The close double-star.

Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1844.	Mean N.P.D. Jan. 1, 1844.	Annual Variation.	Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1844.	Mean N.P.D. Jan. 1, 1844.	Annual Variation.
		<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>			<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>
<i>ν</i> Leonis.....	1	11.28.58	89.57.45.43	+19,872	<i>φ</i> Virginis. <i>np.</i>	3	14.20.10	91.31.31.23	+16,420
<i>χ</i> Ursæ Majoris...	2	11.37.47	41.21.19.84	+19,961	<i>Σ</i> 1847. <i>nf.</i>	1	14.20.19	99.30.8.01	+16,412
<i>χ</i> Ursæ Majoris R..	2		19,87		<i>γ</i> Bootis.....	9	14.25.48	51.0.23.28	+16,132
<i>β</i> Virginis.....	3	11.42.34	87.21.23.37	+19,997	<i>γ</i> Bootis R.....	9		23,57	
B.A.C. 4006.....	1	11.43.4	94.27.56.36	+20,001	Piazzì XIV. 148...	5	14.32.49	37.44.43.39	+15,760
<i>γ</i> Ursæ Majoris...	1	11.45.36	35.26.15.92	+20,016	<i>Σ</i> 1876.....	1	14.38.7	96.43.42.82	+15,469
<i>γ</i> Ursæ Majoris R..	1		16,64		<i>ε</i> Bootis <i>sf.</i>	2	14.38.11	62.15.52.69	+15,464
<i>Σ</i> 1582. <i>sp.</i>	1	11.47.59	67.8.56.66	+20,028	<i>ε</i> Bootis R.....	2		53,53	
<i>ο</i> Virginis.....	5	11.57.16	80.24.0.85	+20,054	56 Hydræ.....	3	14.38.39	115.25.45.69	+15,439
<i>ο</i> Virginis R.....	5		23.59.98		<i>Σ</i> 1879.....	2	14.38.39	79.40.56.05	+15,439
<i>Σ</i> 1606.....	4	12.2.54	49.14.22.09	+20,054	<i>Σ</i> 1884. <i>sp.</i>	1	14.41.28	64.58.55.90	+15,280
<i>Σ</i> 1619. <i>sf.</i>	2	12.7.9	96.23.15.24	+20,046	<i>α</i> ² Libræ.....	2	14.42.16	105.23.21.57	+15,234
<i>δ</i> Ursæ Majoris...	5	12.7.41	32.5.59.63	+20,044	<i>α</i> ² Libræ R.....	2		20,30	
<i>δ</i> Ursæ Majoris R..	5		6.0.15		<i>Σ</i> 1885. <i>np.</i>	1	14.42.35	89.22.39.59	+15,217
<i>η</i> Virginis.....	5	12.11.56	89.47.55.28	+20,028	<i>Σ</i> ₂ 286.....	2	14.44.2	42.46.12.50	+15,134
<i>Σ</i> 1633. <i>nf.</i>	3	12.12.49	62.4.25.62	+20,024	<i>Σ</i> ₂ 288.....	2	14.46.5	73.39.16.02	+15,016
H. C. 23132.....	2	12.13.35	64.8.9.79	+20,020	<i>Σ</i> 1898. <i>nf.</i>	2	14.52.37	30.4.30.95	+14,631
<i>Σ</i> ₂ 251.....	2	12.21.20	57.44.37.71	+19,969	<i>Σ</i> 1907.....	1	14.58.5	77.45.22.95	+14,300
<i>δ</i> Corvi.....	1	12.21.48	105.38.45.11	+19,965	<i>i</i> Bootis. <i>nf.</i>	8	14.58.39	41.44.8.13	+14,265
<i>δ</i> Corvi R.....	1		45,37		<i>i</i> Bootis R.....	9		8,41	
<i>γ</i> Virginis.....	4	12.25.44	98.35.25.35	+19,929	<i>β</i> Libræ.....	1	15.8.37	98.48.10.22	+13,636
<i>Σ</i> 1659.....	1	12.27.28	101.9.33.84	+19,912	<i>β</i> Libræ R.....	1		11,62	
<i>Σ</i> 1661.....	1	12.28.8	77.43.52.34	+19,904	<i>Σ</i> ₂ 295.....	2	15.9.0	52.35.18.07	+13,614
<i>γ</i> Virginis. <i>sp.</i>	1	12.33.45	90.35.32.54	+19,839	Piazzì XV. 74.....	2	15.18.37	52.6.8.63	+12,984
<i>γ</i> Virginis R.....	1		33,63		B. xv. 358.....	2	15.19.2	84.12.43.54	+12,956
<i>Σ</i> ₂ 254.....	2	12.36.40	30.16.25.14	+19,799	<i>β</i> Coronæ Borealis.	2	15.21.24	60.21.11.12	+12,797
<i>Σ</i> 1678. <i>nf.</i>	1	12.37.37	74.46.18.48	+19,786	<i>β</i> Coronæ Bor. R...	2		10,47	
<i>Σ</i> 1680. <i>sf.</i>	1	12.41.32	67.22.17.81	+19,727	<i>i</i> Draconis.....	4	15.21.28	30.29.6.73	+12,793
<i>ψ</i> Virginis.....	2	12.46.15	98.41.25.28	+19,648	<i>i</i> Draconis R.....	4		8,01	
<i>ε</i> Ursæ Majoris...	6	12.47.9	33.11.32.13	+19,633	<i>Σ</i> 1956. <i>sp.</i>	2	15.27.46	47.39.53.47	+12,364
<i>ε</i> Ursæ Majoris R..	6		32,74		<i>α</i> Coronæ Borealis.	1	15.28.5	62.45.23.16	+12,340
<i>Σ</i> 1690. <i>np.</i>	2	12.48.13	94.1.1.45	+19,613	<i>α</i> Coronæ Bor. R...	1		24,01	
<i>α</i> Canum Venat....	2	12.48.43	50.50.14.88	+19,603	<i>Σ</i> ₂ 298.....	1	15.30.30	49.40.51.94	+12,174
<i>α</i> Canum Venat. R.	2		15,66		<i>Σ</i> 1963. <i>sf.</i>	1	15.31.33	59.23.0.41	+12,101
<i>ε</i> Virginis.....	1	12.54.25	78.12.3.75	+19,493	<i>α</i> Serpentis.....	2	15.36.35	83.4.45.81	+11,745
<i>ε</i> Virginis R.....	1		6,69		<i>α</i> Serpentis R.....	2		45,71	
<i>Σ</i> 1719. <i>sp.</i>	2	12.59.22	88.34.29.13	+19,386	<i>γ</i> Coronæ Borealis.	1	15.36.11	63.12.22.64	+11,775
<i>Σ</i> 260.....	2	13.0.34	62.13.10.39	+19,359	<i>β</i> Serpentis. <i>nf.</i>	1	15.38.59	74.5.8.29	+11,576
<i>θ</i> Virginis.....	3	13.1.53	94.42.14.58	+19,329	<i>Σ</i> 1973. <i>sf.</i>	1	15.40.35	53.4.7.95	+11,462
<i>Σ</i> 1727. <i>sf.</i>	1	13.2.30	57.47.59.78	+19,314	<i>Σ</i> 1977. <i>sf.</i>	2	15.42.58	64.3.38.21	+11,290
53 Virginis.....	1	13.3.46	105.21.18.57	+19,284	<i>Σ</i> 1985. <i>sf.</i>	2	15.47.50	91.42.2.47	+10,935
B. XIII. 113.....	2	13.7.23	97.13.49.45	+19,195	Piazzì XV. 220. <i>sf.</i>	2	15.49.27	86.8.19.99	+10,816
21 Canum Venat...	3	13.11.36	39.29.44.32	+19,085	<i>β</i> ¹ Scorpil.....	3	15.56.23	109.22.22.89	+10,299
21 Canum Venat. R.	3		45,88		<i>Σ</i> 2007. <i>sf.</i>	2	15.58.47	76.15.5.27	+10,120
<i>Σ</i> 1734.....	1	13.12.47	86.14.12.18	+19,052	<i>θ</i> Draconis.....	4	15.58.58	31.0.59.09	+10,106
<i>Σ</i> 1737. <i>nf.</i>	1	13.14.12	71.24.54.07	+19,013	<i>θ</i> Draconis R.....	4		58,63	
<i>Σ</i> 1742.....	1	13.16.22	87.47.0.83	+18,952	<i>κ</i> Herculis. <i>sp.</i>	1	16.1.2	72.31.59.40	+9,949
Spica.....	9	13.16.59	100.20.41.60	+18,934	<i>τ</i> Herculis.....	6	16.15.3	43.18.43.91	+8,866
Spica R.....	7		42,94		<i>τ</i> Herculis R.....	6		43,38	
<i>Σ</i> ₂ 266.....	3	13.20.50	73.28.54.35	+18,821	Antares.....	1	16.19.51	116.4.48.85	+8,485
B. XIII. 375.....	2	13.22.45	97.3.20.96	+18,762	Antares R.....	1		48,54	
<i>Σ</i> 269.....	2	13.25.48	54.17.18.88	+18,666	22 Scorpil.....	2	16.20.44	114.45.57.38	+8,418
B.A.C. 4530. <i>sp.</i> ...	3	13.26.19	89.30.44.81	+18,650	<i>η</i> Draconis.....	5	16.21.54	28.7.53.04	+8,325
<i>Σ</i> 1768.....	3	13.30.32	52.54.31.58	+18,511	<i>η</i> Draconis R.....	5		52,47	
<i>m</i> Virginis.....	2	13.33.26	97.54.47.65	+18,412	<i>λ</i> Ophiuchi. <i>sp.</i>	1	16.23.3	87.40.12.58	+8,233
<i>Σ</i> 1776. <i>nf.</i>	2	13.35.21	42.59.22.81	+18,345	<i>Σ</i> 3105.....	1	16.23.26	96.40.54.19	+8,203
<i>η</i> Ursæ Majoris...	16	13.41.23	39.54.21.69	+18,124	<i>Σ</i> ₂ 313.....	1	16.27.17	49.33.16.84	+7,894
<i>η</i> Ursæ Majoris R..	16		21,97		<i>ζ</i> Ophiuchi.....	2	16.28.35	100.14.44.02	+7,789
<i>x</i> Virginis.....	1	13.41.24	107.21.14.53	+18,124	<i>ζ</i> Ophiuchi R.....	2		44,41	
<i>Σ</i> ₂ 271.....	2	13.46.16	79.5.26.87	+17,938	<i>ζ</i> Herculis. <i>sp.</i>	5	16.35.24	58.6.39.16	+7,236
<i>η</i> Bootis.....	2	13.47.15	70.49.3.46	+17,898	<i>ζ</i> Herculis R.....	5		38,83	
<i>η</i> Bootis R.....	2		4,41		<i>Σ</i> 2089. <i>sp.</i>	1	16.36.54	64.33.41.78	+7,114
<i>Σ</i> ₂ 273.....	2	13.48.30	83.56.28.81	+17,850	<i>g</i> Draconis.....	1	16.39.51	25.6.52.30	+6,872
<i>τ</i> Virginis.....	1	13.53.43	87.41.51.64	+17,637	<i>g</i> Draconis R.....	1		52,31	
<i>α</i> Draconis.....	4	14.0.10	24.52.37.37	+17,361	<i>Σ</i> 2104. <i>sp.</i>	1	16.43.6	53.48.6.64	+6,604
<i>α</i> Draconis R.....	4		36,97		52 Herculis.....	10	16.44.40	43.44.30.62	+6,474
<i>Σ</i> 1804. <i>sp.</i>	1	14.0.59	68.3.40.42	+17,325	52 Herculis R.....	10		30,09	
<i>κ</i> Virginis.....	2	14.4.35	99.32.39.34	+17,165	B. xvi. 878.....	2	16.45.27	86.42.56.01	+6,409
<i>Σ</i> 1819.....	1	14.7.29	86.8.28.88	+17,032	Piazzì XVI. 270. <i>np.</i>	1	16.54.29	81.19.5.23	+5,656
Arcturns.....	8	14.8.33	70.0.9.61		<i>h</i> ¹ Draconis.....	8	16.55.11	24.37.34.84	+5,597
Arcturns R.....	8		9,84		<i>h</i> ¹ Draconis R.....	8		33,90	
<i>λ</i> Virginis.....	3	14.10.41	102.38.57.94	+16,882	<i>μ</i> Draconis. <i>sp.</i>	1	17.2.6	35.19.19.76	+5,013

Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1844.	Mean N.P.D. Jan. 1, 1844.	Annual Variation.	Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1844.	Mean N.P.D. Jan. 1, 1844.	Annual Variation.
		<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>			<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>
μ Draconis. <i>nf.</i>	1	17. 2. 6	35. 19. 17,82		Σ 2525.....	2	19. 20. 13	62. 59. 23,37	- 6,877
Σ 2133. <i>nf.</i>	1	17. 4. 44	40. 2. 28,54	+ 4,788	Σ 2533. <i>nf.</i>	2	19. 22. 4	90. 45. 45,71	- 7,029
α Herculis. <i>np.</i>	4	17. 7. 32	75. 25. 37,19	+ 4,549	Σ 375.....	1	19. 27. 40	72. 12. 33,02	- 7,486
α Herculis R.....	4		37,93		ϵ^1 Sagittarii.....	4	19. 31. 47	106. 38. 42,93	- 7,819
δ Herculis. <i>np.</i>	1	17. 8. 38	64. 58. 21,01	+ 4,458	θ Cygni.....	2	19. 32. 15	40. 8. 14,04	- 7,856
Piazzi XVII. 58....	1	17. 11. 12	33. 41. 19,57	+ 4,238	θ Cygni R.....	2		13,42	
Σ 2157. <i>nf.</i>	1	17. 15. 54	73. 23. 3,38	+ 3,835	Σ 2556.....	3	19. 32. 44	68. 5. 51,03	- 7,895
ρ Herculis. <i>sf.</i>	2	17. 18. 18	52. 42. 24,09	+ 3,629	ϵ^2 Sagittarii.....	1	19. 33. 36	106. 29. 2,44	- 7,965
σ Ophiuchi.....	1	17. 18. 47	85. 43. 8,36	+ 3,587	Σ 2576. <i>np.</i>	3	19. 39. 38	56. 45. 16,70	- 8,447
σ Ophiuchi R.....	1		7,73		δ Cygni. <i>sp.</i>	1	19. 40. 6	45. 14. 48,26	- 8,484
Σ 2166. <i>sf.</i>	3	17. 20. 35	78. 28. 28,98	+ 3,432	δ Cygni R.....	1		48,79	
α Ophiuchi.....	3	17. 27. 42	77. 19. 17,54	+ 2,816	57 Sagittarii.....	2	19. 43. 8	109. 26. 9,49	- 8,724
α Ophiuchi R.....	3		16,70		Σ 2596. <i>sf.</i>	1	19. 46. 53	75. 6. 35,41	- 9,018
ν^1 Draconis.....	1	17. 29. 7	34. 42. 26,50	+ 2,694	b Sagittarii.....	2	19. 47. 22	117. 34. 39,36	- 9,056
ν^1 Draconis R.....	3		24,90		β Aquilæ.....	1	19. 47. 39	83. 58. 40,71	- 8,540
ν^2 Draconis.....	2	17. 29. 12	34. 43. 6,67	+ 2,687	β Aquilæ R.....	1		41,42	
Σ 333.....	2	17. 29. 31	79. 19. 26,08	+ 2,660	* (Mag. 9.).....	3	19. 52. 19	57. 8. 18,22	- 9,440
ι Herculis.....	2	17. 35. 4	43. 54. 28,47	+ 2,178	Σ 2606.....	3	19. 52. 32	57. 8. 39,06	- 9,457
ι Herculis R.....	2		26,02		Σ 2607. <i>sf.</i>	1	19. 52. 42	48. 9. 26,10	- 9,470
γ Ophiuchi.....	1	17. 40. 4	87. 13. 42,92	+ 1,742	Σ 2611. <i>sp.</i>	1	19. 54. 9	43. 3. 34,75	- 9,581
γ Ophiuchi R.....	1		43,04		Σ 2626.....	3	19. 58. 1	59. 53. 42,67	- 9,877
Σ 2224. <i>sf.</i>	1	17. 40. 49	50. 36. 53,22	+ 1,677	ρ Draconis.....	1	20. 2. 6	22. 34. 14,74	- 10,186
Piazzi XVII. 260..	1	17. 43. 2	82. 43. 6,27	+ 1,483	ρ Draconis R.....	1		16,25	
ξ Draconis.....	1	17. 50. 50	33. 6. 2,75	+ 0,802	Σ 2643. <i>sp.</i>	2	20. 4. 38	93. 27. 29,70	- 10,377
ξ Draconis R.....	1		1,90		α^2 Capricorni.....	3	20. 9. 24	103. 1. 25,59	- 10,733
τ Ophiuchi.....	1	17. 54. 35	98. 10. 28,10	+ 0,474	α^2 Capricorni R....	3		23,95	
Σ 341.....	2	17. 59. 12	68. 33. 41,60	+ 0,070	Σ 2658*.....	2	20. 9. 32	37. 21. 15,81	- 10,741
Σ 2286. <i>sf.</i>	1	18. 2. 27	89. 28. 49,20	- 0,214	32 Cygni.....	4	20. 10. 39	42. 45. 43,72	- 10,824
μ^1 Sagittarii.....	1	18. 4. 26	111. 5. 35,64	- 0,391	32 Cygni R.....	4		43,56	
μ^1 Sagittarii R....	1		37,89		* (Mag. 7, 8.).....	2	20. 11. 53	76. 6. 0,08	- 10,914
Σ 2303. <i>nf.</i>	1	18. 11. 36	98. 2. 26,25	- 1,015	Σ 2671. <i>sf.</i>	3	20. 14. 34	35. 5. 19,91	- 11,111
η Serpentis.....	1	18. 13. 14	92. 56. 1,84	- 1,157	Σ 2681†.....	3	20. 18. 38	37. 5. 1,53	- 11,405
η Serpentis R.....	1		0,67		ρ Capricorni.....	3	20. 19. 57	108. 19. 29,78	- 11,500
λ Sagittarii.....	1	18. 18. 21	115. 30. 7,14	- 1,604	* (Mag. 10.).....	1	20. 24. 13	26. 36. 54,44	- 11,804
δ Ursæ Minoris....	8	18. 22. 39	3. 24. 21,49	- 1,965	ω^2 Cygni.....	2	20. 25. 14	41. 34. 12,51	- 11,875
δ Ursæ Minoris R..	8		21,48		ω^2 Cygni R.....	2		13,40	
δ Ursæ Minoris SP.	3		22,04		ν Capricorni.....	1	20. 31. 10	108. 41. 0,91	- 12,290
δ Ursæ Min. SP. R.	3		22,21		α Cygni.....	11	20. 36. 7	45. 16. 27,39	- 12,630
α Lyrae.....	12	18. 31. 39	51. 21. 28,49	- 2,763	α Cygni R.....	11		27,55	
α Lyrae R.....	12		28,61		ϵ Aquarii.....	2	20. 39. 14	100. 3. 45,60	- 12,840
Σ 2369.....	1	18. 36. 6	87. 31. 37,98	- 3,146	ϵ Aquarii R.....	1		45,01	
Σ 2400. <i>sf.</i>	1	18. 41. 55	73. 55. 1,66	- 3,648	η Cephei.....	1	20. 42. 6	28. 45. 55,36	- 13,031
β Lyrae.....	1	18. 44. 19	56. 48. 51,09	- 3,856	η Cephei R.....	1		57,03	
β Lyrae R.....	1		52,00		μ Aquarii.....	3	20. 44. 14	99. 33. 51,71	- 13,173
ν^1 Sagittarii.....	2	18. 44. 45	112. 55. 50,55	- 3,891	Σ 2738. <i>nf.</i>	1	20. 51. 16	74. 9. 47,93	- 13,630
Σ 2415. <i>sf.</i>	2	18. 47. 50	69. 34. 36,72	- 4,156	θ Capricorni.....	2	20. 57. 10	107. 50. 55,60	- 14,005
σ Draconis. <i>sf.</i>	5	18. 48. 54	30. 48. 2,71	- 4,247	Σ 2757.....	1	20. 59. 43	38. 13. 11,92	- 14,164
σ Draconis R.....	5		2,08		61 ¹ Cygni.....	5	20. 59. 55	52. 0. 51,05	- 17,472
σ Sagittarii.....	2	18. 55. 20	111. 57. 50,67	- 4,795	61 ¹ Cygni R.....	5		51,24	
H. C. 35690.....	1	18. 57. 9	66. 52. 24,88	- 4,950	ν Aquarii.....	2	21. 1. 6	101. 59. 58,43	- 14,249
Σ 2445. <i>nf.</i>	1	18. 58. 5	66. 54. 1,42	- 5,029	* (Mag. 9, 10.)....	6	21. 2. 18	100. 50. 26,90	- 14,323
ζ Aquilæ.....	1	18. 58. 14	76. 21. 50,45	- 5,044	* (Mag. 9.).....	3	21. 2. 22	99. 59. 0,40	- 14,327
ζ Aquilæ R.....	1		49,41		Σ 2776†.....	2	21. 6. 58	100. 59. 32,93	- 14,606
B.A.C. 6530.....	2	18. 58. 27	37. 57. 47,12	- 5,060	B. xxi. 222.....	6	21. 10. 0	102. 54. 56,70	- 14,786
17 Lyrae <i>sf.</i>	3	19. 1. 32	57. 44. 25,38	- 5,320	ι Capricorni.....	3	21. 13. 33	107. 29. 42,40	- 14,994
Σ 2466. <i>np.</i>	3	19. 1. 49	60. 26. 30,17	- 5,344	α Cephei.....	11	21. 14. 51	28. 4. 25,31	- 15,070
* (Mag. 9.).....	2	19. 5. 36	71. 2. 58,00	- 5,662	α Cephei R.....	11		26,01	
Σ 2482. <i>sf.</i>	2	19. 6. 11	71. 7. 14,38	- 5,712	β Aquarii.....	4	21. 23. 21	96. 15. 14,07	- 15,551
Σ 2484. <i>nf.</i>	1	19. 7. 24	71. 11. 55,78	- 5,813	β Aquarii R.....	3		14,53	
53 Draconis.....	2	19. 8. 43	33. 24. 16,56	- 5,924	β Cephei. <i>nf.</i>	3	21. 26. 38	20. 7. 23,97	- 15,730
53 Draconis R.....	2		17,27		β Cephei R.....	3		23,80	
Σ 2489. <i>sf.</i>	1	19. 9. 18	75. 43. 36,29	- 5,972	ξ Aquarii.....	2	21. 29. 27	98. 33. 1,24	- 15,882
B.A.C. 6590.....	6	19. 10. 6	105. 48. 8,08	- 6,039	ϵ Pegasi.....	1	21. 36. 31	80. 50. 14,25	- 16,253
B.A.C. 6603. <i>sp.</i> ...	1	19. 11. 15	40. 12. 6,64	- 6,135	ϵ Pegasi R.....	1		13,84	
Σ 2499.....	3	19. 11. 53	68. 19. 54,79	- 6,188	λ Capricorni.....	2	21. 38. 8	102. 4. 55,88	- 16,334
ρ^1 Sagittarii.....	1	19. 12. 37	108. 8. 6,96	- 6,249	ν Cephei.....	1	21. 40. 57	29. 35. 50,83	- 16,476
ρ^2 Sagittarii.....	2	19. 12. 45	108. 35. 30,68	- 6,260	ν Cephei R.....	1		50,09	
* (Mag. 7, 8.).....	5	19. 13. 26	110. 55. 45,14	- 6,317	π^2 Cygni.....	4	21. 41. 2	41. 24. 37,09	- 16,480
Σ 2504. <i>sf.</i>	3	19. 14. 8	71. 8. 43,52	- 6,375	π^2 Cygni R.....	3		36,35	

* The *np* of the two brightest of three.

† The brightest of four.

‡ The brightest of three.

Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1844.	Mean N.P.D. Jan. 1, 1844.	Annual Variation.	Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1844.	Mean N.P.D. Jan. 1, 1844.	Annual Variation.
		<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>			<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>
* (Mag. 9.).....	3	21.43.39	71.28.44,28	-16,610	Σ 2916*.....	1	22.24.30	49.34.49,39	-18,339
* (Mag. 10.) <i>sp.</i> ...	1	21.44.2	71.27.32,68	-16,628	η Aquarii.....	3	22.27.20	90.55.9,82	-18,438
Σ 2834. <i>sf.</i>	2	21.44.20	71.25.15,86	-16,643	κ Aquarii.....	2	22.29.41	95.1.50,04	-18,518
μ Capricorni.....	2	21.44.47	104.16.59,22	-16,665	* (Mag. 9, 10).....	2	22.36.2	24.15.38,30	-18,724
Σ 2848. <i>sp.</i>	3	21.50.12	84.47.59,91	-16,924	τ ¹ Aquarii. <i>np.</i> †....	3	22.39.26	104.52.36,42	-18,829
30 Aquarii.....	1	21.55.4	97.16.23,93	-17,149	3 Piscium.....	1	22.52.38	90.39.1,63	-19,195
α Aquarii.....	3	21.57.46	91.4.29,74	-17,271	α Pegasi.....	1	22.57.0	75.37.57,71	-19,303
α Aquarii R.....	3		29,44		α Pegasi R.....	1		57,79	
ι Aquarii.....	1	21.58.0	104.37.25,69	-17,280	π Cephei.....	1	23.2.57	15.27.18,34	-19,438
ι Aquarii R.....	1		25,92		π Cephei R.....	1		19,75	
Σ 2861. <i>nf.</i>	2	21.58.40	69.57.11,64	-17,310	γ Piscium.....	2	23.9.5	87.34.7,69	-19,563
Σ 2878. <i>np.</i>	2	22.6.43	82.47.40,80	-17,655	8 Andromedæ....	7	23.10.32	41.50.9,83	-19,590
Σ 2882. <i>np.</i>	1	22.7.29	53.1.34,99	-17,686	8 Andromedæ R...	7		9,26	
θ Aquarii.....	1	22.8.36	98.33.25,64	-17,733	κ Piscium.....	4	23.18.56	89.35.50,04	-19,734
Σ 2889. <i>nf.</i>	1	22.9.6	64.30.8,54	-17,753	B.A.C. 8188.....	3	23.22.51	32.18.38,14	-19,793
ε Cephei.....	1	22.9.18	33.43.58,32	-17,761	B.A.C. 8188 R....	3		36,60	
ε Cephei R.....	1		58,21		ι Piscium.....	3	23.31.56	85.13.7,42	-19,355
γ Aquarii.....	1	22.13.36	92.10.15,97	-17,933	ι Piscium R.....	3		7,26	
Σ 2902. <i>sp.</i>	2	22.17.2	45.26.18,79	-18,065	ψ Andromedæ....	4	23.38.19	44.26.44,19	-19,966
B. xxii. 425.....	2	22.19.30	75.39.40,76	-18,158	ψ Andromedæ R..	4		43,80	
Σ 2905.....	2	22.19.35	75.38.24,64	-18,161	ω Piscium.....	2	23.51.18	84.0.0,63	-20,041
ζ Aquarii. <i>sf.</i>	1	22.20.48	90.49.0,61	-18,206	* (Mag. 10).....	1	23.56.11	26.10.37,88	-20,053
ζ Aquarii R.....	1		90.48.59,49		33 Piscium.....	2	23.57.21	96.34.47,90	-20,054
δ Cephei.....	2	22.23.23	32.22.54,72	-18,300	Σ 3062.....	2	23.58.8	32.25.59,32	-20,055
δ Cephei R.....	2		54,88						

* The brightest of three.

† This is Σ 2943.

SIDEREAL INTERVALS OCCUPIED BY TRANSITS OF THE DIAMETER

OF THE SUN

AND

VERTICAL DIAMETERS

OF THE SUN, MOON, AND PLANET VENUS,

DEDUCED FROM THE TRANSIT AND CIRCLE OBSERVATIONS, AND
COMPARED WITH THE VALUES IN THE NAUTICAL ALMANAC.

1844.

I. SIDEREAL INTERVALS occupied by TRANSITS of the SUN'S DIAMETER, and VERTICAL DIAMETERS of the SUN corrected for REFRACTION and PARALLAX; compared with the values in the NAUTICAL ALMANAC.

Day of Observation.	Interval by Observation.	Seconds of Tabular Interval.	Excess of Tabular Interval.	Vertical Diameter by Observation.	Seconds of Tabular Diameter.	Excess of Tabular Diam.	Day of Observation.	Interval by Observation.	Seconds of Tabular Interval.	Excess of Tabular Interval.	Vertical Diameter by Observation.	Seconds of Tabular Diameter.	Excess of Tabular Diam.
1844.	m. s.	s.	s.	" "	" "	" "	1844.	m. s.	s.	s.	" "	" "	" "
Jan. 6	2. 21,50	21,50	0,00	32. 30,90	34,60	+ 3,70	Apr. 27	2. 11,50	11,40	- 0,10	31. 45,69	47,80	+ 2,11
10	21,09	20,94	- 0,15	35,22	34,20	- 1,02	29	11,79	11,70	- 0,09	43,45	46,80	+ 3,35
11	20,85	20,78	- 0,07				30	11,99	11,86	- 0,13	44,45	46,40	+ 1,95
15	20,17	20,10	- 0,07	34,65	33,60	- 1,05	May 1	12,13	12,02	- 0,11	45,30	45,80	+ 0,50
16	19,90	19,92	+ 0,02	34,60	33,40	- 1,20	2	12,22	12,18	- 0,04	47,13	45,40	- 1,73
18	19,53	19,54	+ 0,01	36,40	33,20	- 3,20	3	12,26	12,34	+ 0,08	43,97	45,00	+ 1,03
20	19,03	19,14	+ 0,11	30,52	32,80	+ 2,28	7	13,06	12,98	- 0,08	41,35	43,20	+ 1,85
24	18,29	18,30	+ 0,01				8	13,07	13,14	+ 0,07	42,26	42,60	+ 0,34
25	18,01	18,08	+ 0,07	32,18	31,80	- 0,38	11	13,47	13,64	+ 0,17	37,02	41,40	+ 4,38
26	17,94	17,86	- 0,08	32,12	31,60	- 0,52	16	14,43	14,44	+ 0,01	39,00	39,40	+ 0,40
30	16,89	16,96	+ 0,07	29,48	30,60	+ 1,12	20	15,06	15,06	0,00	39,19	37,80	- 1,39
Feb. 1	16,42	16,50	+ 0,08	32,02	30,00	- 2,02	24	15,61	15,66	+ 0,05	36,65	36,60	- 0,05
3	16,06	16,06	0,00	27,72	29,40	+ 1,68	25	15,81	15,80	- 0,01	36,05	36,20	+ 0,15
5	15,60	15,60	0,00	31,57	28,80	- 2,77	31	16,67	16,56	- 0,11	35,60	34,60	- 1,00
6	15,19	15,36	+ 0,17	28,30	28,40	+ 0,10	June 1	16,81	16,68	- 0,13	35,19	34,20	- 0,99
7	15,09	15,14	+ 0,05				5				28,67	33,20	+ 4,53
8	14,93	14,90	- 0,03	25,36	27,60	+ 2,24	8				33,27	32,60	- 0,67
9	14,57	14,68	+ 0,11	28,05	27,40	- 0,65	12	17,84	17,58	- 0,26	32,47	31,80	- 0,67
10	14,38	14,46	+ 0,08	24,19	27,00	+ 2,81	13	17,76	17,62	- 0,14	29,00	31,60	+ 2,60
13	13,85	13,80	- 0,05	26,09	25,80	- 0,29	14	17,78	17,66	- 0,12	28,46	31,40	+ 2,94
16	13,07	13,16	+ 0,09	23,06	24,40	+ 1,34	18	17,73	17,74	+ 0,01	27,56	30,80	+ 3,24
17	12,85	12,96	+ 0,11	19,46	24,00	+ 4,54	21				27,44	30,60	+ 3,16
20	12,37	12,36	- 0,01	24,30	22,80	- 1,50	22	17,89	17,74	- 0,15	29,56	30,40	+ 0,84
23	11,72	11,80	+ 0,08	21,14	21,40	+ 0,26	24				30,44	30,40	- 0,04
27	11,02	11,12	+ 0,10	19,73	19,60	- 0,13	27				28,63	30,20	+ 1,57
28	10,85	10,96	+ 0,11	19,96	19,20	- 0,76	28				28,41	30,20	+ 1,79
29	10,70	10,80	+ 0,10				29	17,68	17,50	- 0,18	29,87	30,20	+ 0,33
Mar. 1	10,61	10,66	+ 0,05	17,79	18,20	+ 0,41	July 1				28,50	30,20	+ 1,70
2				19,09	17,80	- 1,29	10	16,42	16,50	+ 0,08	32,67	30,40	- 2,27
5				15,24	16,20	+ 0,96	22	14,96	14,78	- 0,18	33,92	31,80	- 2,12
7	9,77	9,88	+ 0,11				23	14,69	14,62	- 0,07	28,80	32,00	+ 3,20
8	9,78	9,76	- 0,02	16,18	14,60	- 1,58	25	14,36	14,30	- 0,06	30,77	32,40	+ 1,63
9	9,51	9,66	+ 0,15				26	14,11	14,12	+ 0,01			
12	9,35	9,38	+ 0,03				27	13,87	13,96	+ 0,09	31,25	33,00	+ 1,75
18	8,96	9,00	+ 0,04	11,33	9,20	- 2,13	Aug. 2	12,94	12,94	0,00	36,93	34,40	- 2,53
19				8,26	8,60	+ 0,34	5	12,44	12,40	- 0,04	35,30	35,20	- 0,10
21	8,94	8,86	- 0,08	6,31	7,60	+ 1,29	8	11,61	11,90	+ 0,29	36,59	36,00	- 0,59
28	8,66	8,80	+ 0,14	5,74	3,80	- 1,94	19	10,49	10,18	- 0,31	40,11	40,00	- 0,11
29	8,72	8,80	+ 0,08	4,79	3,20	- 1,59	24				42,41	42,00	- 0,41
30	8,81	8,82	+ 0,01	5,07	2,60	- 2,47	26	9,24	9,28	+ 0,04	43,14	43,00	- 0,14
Apr. 1	8,77	8,88	+ 0,11	3,61	1,60	- 2,01	27				41,83	43,40	+ 1,57
2	8,90	8,92	+ 0,02				28	9,20	9,08	- 0,12			
3	8,82	8,96	+ 0,14	32. 2,16	0,60	- 1,56	29	9,11	8,98	- 0,13	45,34	44,40	- 0,94
4	8,90	9,00	+ 0,10	31. 59,29	60,00	+ 0,71	30	8,94	8,88	- 0,06	47,16	44,80	- 2,36
6				59,23	58,80	- 0,43	31	8,73	8,78	+ 0,05	44,35	45,20	+ 0,85
8	9,21	9,24	+ 0,03	57,93	57,60	- 0,33	Sept. 2	8,57	8,62	+ 0,05	44,06	46,20	+ 2,14
9	9,24	9,32	+ 0,08	56,49	57,20	+ 0,71	3				44,35	46,60	+ 2,25
10	9,35	9,40	+ 0,05	55,90	56,60	+ 0,70	4	8,62	8,46	- 0,16	47,06	47,00	- 0,06
11	9,53	9,48	- 0,05				5				47,24	47,60	+ 0,36
12	9,48	9,56	+ 0,08	56,26	55,40	- 0,86	11	8,07	8,10	+ 0,03	49,09	50,40	+ 1,31
15				53,65	53,80	+ 0,15	13	7,96	8,04	+ 0,08	50,46	51,60	+ 1,14
17	9,91	10,08	+ 0,17	51,56	52,80	+ 1,24	16	7,90	8,00	+ 0,10	51,60	53,20	+ 1,60
19	10,24	10,32	+ 0,08	52,41	51,60	- 0,81	19				54,03	54,80	+ 0,77
23	10,81	10,84	+ 0,03	51,08	49,60	- 1,48	20	8,47	8,06	- 0,41	54,89	55,20	+ 0,31
24	11,00	10,98	- 0,02	31. 51,37	49,20	- 2,17	23	8,05	8,16	+ 0,11	55,24	57,00	+ 1,76
26	2. 11,40	11,26	- 0,14				25	2. 8,07	8,24	+ 0,17	31. 58,11	58,00	- 0,11

Day of Observation.	Interval by Observation.	Seconds of Tabular Interval.	Excess of Tabular Interval.	Vertical Diameter by Observation.	Seconds of Tabular Diameter.	Excess of Tabular Diam ^r .	Day of Observation.	Interval by Observation.	Seconds of Tabular Interval.	Excess of Tabular Interval.	Vertical Diameter by Observation.	Seconds of Tabular Diameter.	Excess of Tabular Diam ^r .
1844.	m. s.	s.	s.	" "	" "	" "	1844.	m. s.	s.	s.	" "	" "	" "
Sept. 26	2. 8,37	8,30	- 0,07	31. 56,52	58,60	+ 2,08	Nov. 6				32. 19,87	20,40	+ 0,53
27	8,32	8,36	+ 0,04	31. 59,70	59,20	- 0,50	7	2. 15,21	15,24	+ 0,03	22,41	20,80	- 1,61
28	8,32	8,42	+ 0,10	32. 1,42	59,60	- 1,82	8	15,38	15,48	+ 0,10	20,58	21,20	+ 0,62
30	8,69	8,58	- 0,11	2,22	0,80	- 1,42	20	18,27	18,30	+ 0,03	25,08	26,40	+ 1,32
Oct. 2				0,80	1,80	+ 1,00	21	18,55	18,52	- 0,03	23,56	26,80	+ 3,24
4	8,86	8,94	+ 0,08	4,12	3,00	- 1,12	26	19,61	19,56	- 0,05	29,75	28,60	- 1,15
9	9,44	9,54	+ 0,10	5,81	5,60	- 0,21	27	19,80	19,76	- 0,04	29,77	28,80	- 0,97
10	9,54	9,68	+ 0,14	7,18	6,20	- 0,98	Dec. 4	21,12	20,98	- 0,14	33,86	30,80	- 3,06
11	10,04	9,82	- 0,22	6,60	6,80	+ 0,20	5	21,18	21,12	- 0,06	29,09	31,20	+ 2,11
17	10,79	10,78	- 0,01	8,48	10,00	+ 1,52	6	21,37	21,26	- 0,11	31,24	31,40	+ 0,16
23	11,90	11,92	+ 0,02	32. 12,17	13,40	+ 1,23	20	22,46	22,38	- 0,08	33,93	34,00	+ 0,07
31	2. 13,55	13,62	+ 0,07				28	2. 22,15	22,22	+ 0,07	32. 34,24	34,60	+ 0,36

II. VERTICAL DIAMETERS *of the MOON, corrected for REFRACTION and PARALLAX;*
compared with the values in the NAUTICAL ALMANAC.

Day of Observation.	Measured Diameter.	Correction for Parallax.	Correction for Defect of Illumination.	Corrected Diameter.	Tabular Diameter.	Excess of Tabular Diameter.
1844.	" "	" "	" "	" "	" "	" "
June 29	33. 10,39	- 9,56	+ 0,08	33. 0,91	32. 57,12	- 3,79
Aug. 27	31. 32,59	- 16,85	+ 1,96	31. 17,70	31. 15,10	- 2,60

III. VERTICAL DIAMETERS *of* VENUS, *corrected for the apparent form of the Disk ;*
compared with the values in the NAUTICAL ALMANAC.

Day of Observation.	Correction for Form of Disk.	Diameter by Observation.	Tabular Diameter.	Excess of Tabular Diameter.	Day of Observation.	Correction for Form of Disk.	Diameter by Observation.	Tabular Diameter.	Excess of Tabular Diameter.
1844.	"	"	"	"	1844.	"	"	"	"
Jan. 10	0,05	12,48	11,00	- 1,48	May 25	0,06	28,78	26,40	- 2,38
11	0,05	10,16	11,00	+ 0,84	31	0,13	29,23	28,40	- 0,83
13	0,05	9,24	11,20	+ 1,96	June 1	0,15	31,15	28,80	- 2,35
15	0,05	9,35	11,20	+ 1,85	10	0,30	33,87	33,00	- 0,87
17	0,06	9,05	11,20	+ 2,15	11	0,33	35,13	33,60	- 1,53
18	0,07	10,83	11,40	+ 0,57	12	0,34	34,50	34,20	- 0,30
20	0,10	12,91	11,40	- 1,51	14	0,40	36,42	35,20	- 1,22
24	0,09	9,23	11,60	+ 2,37	22	0,62	40,20	40,00	- 0,20
Feb. 1	0,17	12,86	11,80	- 1,06	July 1	1,07	46,27	46,20	- 0,07
5	0,19	13,11	12,00	- 1,11	10	1,86	43,33	52,40	(+ 9,07)
8	0,22	13,80	12,20	- 1,60	15	4,32	53,27	55,00	+ 1,73
13	0,23	12,89	12,40	- 0,49	18	8,66	58,26	56,20	- 2,06
16	0,25	13,06	12,40	- 0,66	20	13,84	54,53	56,60	+ 2,07
27	0,33	14,68	13,00	- 1,68	28	3,05	58,10	56,00	- 2,10
28	0,33	14,33	13,00	- 1,33	30	1,55	54,05	55,20	+ 1,15
29	0,32	13,67	13,20	- 0,47	Aug. 1	0,94	55,52	54,40	- 1,12
Mar. 1	0,35	15,09	13,20	- 1,89	2	0,66	49,09	53,80	+ 4,71
2	0,35	14,77	13,20	- 1,57	4	0,45	53,63	52,80	- 0,83
13	0,35	14,54	14,00	- 0,54	6	0,26	50,91	51,60	+ 0,69
20	0,36	16,28	14,60	- 1,68	18	0,00	45,87	43,20	- 2,67
21	0,33	14,88	14,80	- 0,08	26	0,03	41,79	38,20	- 3,59
26	0,34	16,54	15,20	- 1,34	27	0,04	40,45	37,80	- 2,65
28	0,33	17,21	15,40	- 1,81	28	0,05	39,68	37,20	- 2,48
29	0,32	16,92	15,60	- 1,32	Sept. 1	0,09	35,90	35,00	- 0,90
April 1	0,31	17,91	15,80	- 2,11	2	0,12	38,37	34,40	- 3,97
2	0,27	15,90	16,00	+ 0,10	10	0,24	33,56	30,80	- 2,76
3	0,29	17,61	16,00	- 1,61	19	0,39	28,84	27,40	- 1,44
9	0,27	20,65	16,80	- 3,85	20	0,41	29,18	27,00	- 2,18
10	0,21	17,30	17,00	- 0,30	23	0,50	29,52	26,00	- 3,52
12	0,19	17,17	17,20	+ 0,03	25	0,48	26,28	25,40	- 0,88
17	0,15	17,96	17,60	- 0,36	26	0,52	26,77	25,00	- 1,77
20	0,13	19,28	18,20	- 1,08	27	0,52	25,69	24,80	- 0,89
22	0,11	19,45	18,60	- 0,85	30	0,61	26,48	23,80	- 2,68
23	0,11	20,61	18,80	- 1,81	Oct. 6	0,68	23,86	22,60	- 1,26
24	0,09	20,28	18,80	- 1,48	10	0,73	23,02	21,60	- 1,42
25	0,09	20,76	19,00	- 1,76	16	0,78	21,65	20,40	- 1,25
26	0,07	18,58	19,20	+ 0,62	22	0,81	20,78	19,20	- 1,58
27	0,06	19,21	19,40	+ 0,19	27	0,85	20,86	18,40	- 2,46
29	0,05	21,37	19,80	- 1,57	28	0,78	19,07	18,20	- 0,87
30	0,04	21,22	20,00	- 1,22	Nov. 6	0,79	18,95	17,20	- 1,75
May 1	0,04	21,98	20,20	- 1,78	10	0,72	17,67	16,60	- 1,07
2	0,03	22,12	20,40	- 1,72	15	0,61	15,65	16,20	+ 0,55
3	0,02	22,13	20,60	- 1,53	20	0,63	17,40	15,60	- 1,80
4	0,02	20,73	20,80	+ 0,07	25	0,58	17,40	15,00	- 2,40
6	0,01	21,48	21,20	- 0,28	26	0,52	16,09	15,00	- 1,09
15	0,00	24,19	23,20	- 0,99	Dec. 4	0,47	18,18	14,20	- 3,98
20	0,03	27,81	24,60	- 3,21	5	0,42	16,65	14,20	- 2,45
21	0,03	26,67	25,00	- 1,67	19	0,20	15,11	13,20	- 1,91
23	0,05	27,77	25,80	- 1,97	20	0,21	16,41	13,20	- 3,21
24	0,05	27,48	26,00	- 1,48					

The South Limb was defective from May 15 to August 18: the North Limb was defective the rest of the year.

CONCLUDED

RIGHT ASCENSIONS AND NORTH POLAR DISTANCES

OF THE CENTRES OF

THE SUN, THE MOON,

THE PLANETS MERCURY, VENUS, PALLAS, AND CERES,

AND DE VICO'S FIRST COMET,

OBSERVED WITH THE TRANSIT AND MURAL CIRCLE
IN THE YEAR 1844:

AND

COMPARISON WITH THE RIGHT ASCENSIONS AND NORTH POLAR DISTANCES
OF THE NAUTICAL ALMANAC.

Greenwich Mean Solar Time of Transit of Centre.				Limb Observed.	Reduction to Transit of Centre.	R. A. of Centre from Observation.			Seconds of Tabular R.A.	Excess of Tabular R.A.	Limb Observed.	Parallax.	Assumed Semidiameter.	Geocentric N.P.D. of Centre from Observation.			Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d.	h.	m.	s.		m. s.	h.	m.	s.	s.	s.		"	" "	° ' "	"	"	"	"
Jan.	6.	0	5.30,1			19.	6.	37,03	36,59	-0,44		8,39		112.34.30,57	33,72	+3,15		
	10.	0.	7.12,2			19.	24.	5,63	5,51	-0,12		8,37		112.3.5,44	7,55	+2,11		
	11.	0.	7.36,6			19.	28.	26,67	26,43	-0,24	S.	8,38	16.17,10	111.54.9,90	10,65	+0,75		
	13.	0.	8.23,3								S.	8,36	16.17,00	111.34.56,65	60,17	+3,52		
	15.	0.	9.7,8			19.	45.	44,32	44,23	-0,09		8,33		111.14.8,82	9,28	+0,46		
	16.	0.	9.29,2			19.	50.	2,38	2,11	-0,27		8,33		111.3.7,64	6,89	-0,75		
	18.	0.	10.9,6			19.	58.	35,97	35,80	-0,17		8,31		110.39.46,42	49,90	+3,48		
	20.	0.	10.47,4			20.	7.	7,01	6,63	-0,38		8,29		110.14.57,33	58,81	+1,48		
	24.	0.	11.53,2			20.	23.	59,21	59,14	-0,07								
	25.	0.	12.7,9			20.	28.	10,53	10,27	-0,26		8,23		109.6.18,78	18,94	+0,16		
	26.	0.	12.21,6			20.	32.	20,80	20,58	-0,22		8,22		108.51.32,62	30,75	-1,87		
	30.	0.	13.8,3			20.	48.	53,84	53,50	-0,34		8,16		107.48.55,64	56,77	+1,13		
Feb.	1.	0.	13.26,5			20.	57.	5,22	4,93	-0,29		8,13		107.15.43,96	44,48	+0,52		
	3.	0.	13.41,5			21.	5.	13,39	13,02	-0,37		8,10		106.41.18,17	19,39	+1,22		
	5.	0.	13.53,1			21.	13.	18,09	17,81	-0,28		8,06		106.5.42,00	44,70	+2,70		
	6.	0.	13.57,6			21.	17.	19,21	18,98	-0,23		8,04		105.47.29,24	32,20	+2,96		
	7.	0.	14.1,4			21.	21.	19,58	19,36	-0,22	N.	8,00	16.14,00	105.29.3,71	3,51	-0,20		
	8.	0.	14.4,5			21.	25.	19,17	18,94	-0,23		8,00		105.10.17,58	18,91	+1,33		
	9.	0.	14.6,8			21.	29.	18,07	17,73	-0,34		7,98		104.51.16,76	18,81	+2,05		
	10.	0.	14.8,1			21.	33.	15,90	15,75	-0,15		7,96		104.32.3,41	3,82	+0,41		
	13.	0.	14.8,0			21.	45.	5,43	5,23	-0,20		7,89		103.32.50,49	52,43	+1,94		
	16.	0.	14.1,2			21.	56.	48,32	48,02	-0,30		7,82		102.31.37,73	41,04	+3,31		
	17.	0.	13.57,2			22.	0.	40,91	40,84	-0,07		7,80		102.10.47,80	52,54	+4,74		
	20.	0.	13.42,0			22.	12.	15,28	15,08	-0,20		7,72		101.7.17,89	19,15	+1,26		
	23.	0.	13.20,5			22.	23.	43,42	43,24	-0,18		7,64		100.2.12,25	13,06	+0,81		
	26.	0.	12.53,3	I.	1.5,64	22.	35.	5,80	5,64	-0,16	S.	7,58	16.10,10	98.55.44,10	45,67	+1,57		
	27.	0.	12.42,9			22.	38.	51,89	51,89	0,00		7,53		98.33.18,05	20,47	+2,42		
	28.	0.	12.32,2			22.	42.	37,74	37,57	-0,17		7,50		98.10.45,83	47,77	+1,94		
	29.	0.	12.20,8			22.	46.	22,84	22,70	-0,14								
Mar.	1.	0.	12.8,9			22.	50.	7,46	7,30	-0,16		7,44		97.25.21,07	21,67	+0,60		
	2.	0.	11.56,4									7,41		97.2.27,40	23,98	+1,58		
	5.	0.	11.16,4	I.	1.5,06	23.	5.	1,00	0,74	-0,26		7,31		95.53.17,74	16,98	-0,76		
	7.	0.	10.47,1			23.	12.	24,76	24,83	+0,07	N.	7,22	16.7,60	95.6.43,09	44,18	+1,09		
	8.	0.	10.32,4			23.	16.	6,56	6,29	-0,27		7,21		94.43.19,82	21,48	+1,66		
	9.	0.	10.16,8			23.	19.	47,51	47,39	-0,12	N.	7,15	16.7,10	94.19.51,38	55,08	+3,70		
	12.	0.	9.28,8			23.	30.	49,05	48,81	-0,24	S.	7,09	16.6,30	93.9.13,74	17,19	+3,45		
	13.	0.	9.12,2	I.	1.4,65	23.	34.	28,88	28,71	-0,17								
	18.	0.	7.45,7			23.	52.	44,93	44,80	-0,13		6,85		90.47.12,13	11,69	-0,44		
	19.	0.	7.27,9	II.	1.4,47	23.	56.	23,60	23,47	-0,13		6,81		90.23.28,06	28,89	+0,83		
	21.	0.	6.51,6			0.	3.	40,37	40,38	+0,01		6,74		89.36.4,50	5,09	+0,59		
	22.	0.	6.33,6	I.	1.4,42	0.	7.	18,84	18,66	-0,18	S.	6,72	16.3,50	89.12.23,37	24,89	+1,52		
	28.	0.	4.42,7			0.	29.	7,01	6,96	-0,05		6,46		86.51.10,16	10,68	+0,52		
	29.	0.	4.24,3			0.	32.	45,09	44,97	-0,12		6,42		86.27.47,42	49,28	+1,86		
	30.	0.	4.5,8			0.	36.	23,11	23,01	-0,10		6,38		86.4.31,93	32,08	+0,15		
April	1.	0.	3.29,2			0.	43.	39,43	39,31	-0,12		6,30		85.18.10,40	11,18	+0,78		
	2.	0.	3.11,0			0.	47.	17,74	17,62	-0,12	S.	6,28	16.0,50	84.55.5,17	8,08	+2,91		
	3.	0.	2.52,8			0.	50.	56,08	56,05	-0,03		6,21		84.32.7,51	10,37	+2,86		
	4.	0.	2.34,9			0.	54.	34,67	34,64	-0,03		6,17		84.9.17,63	18,37	+0,74		
	6.	0.	1.59,8	I.	1.4,56	1.	1.	52,61	52,37	-0,24		6,09		83.23.52,20	52,77	+0,57		
	8.	0.	1.25,2			1.	9.	11,05	10,99	-0,06		6,01		82.38.53,94	53,86	-0,08		
	9.	0.	1.8,2			1.	12.	50,49	50,67	+0,18		5,95		82.16.34,22	35,16	+0,94		
	10.	0.	0.51,7			1.	16.	30,52	30,64	+0,12		5,92		81.54.24,84	24,26	-0,58		
	11.	0.	0.35,6			1.	20.	10,94	10,90	-0,04	S.	5,91	15.58,00	81.32.19,96	21,36	+1,40		
	12.	0.	0.19,8			1.	23.	51,65	51,48	-0,17		5,84		81.10.26,52	26,76	+0,24		
	14.	23.	59.34,0	I.	1.4,93	1.	34.	55,42	55,25	-0,17		5,72		80.5.36,64	36,75	+0,11		
	16.	23.	59.5,4			1.	42.	19,82	19,58	-0,24		5,64		79.23.11,16	11,74	+0,58		
	18.	23.	58.38,1			1.	49.	45,49	45,48	-0,01		5,55		78.41.30,51	28,74	-1,77		
	22.	23.	57.48,8			2.	4.	42,37	42,26	-0,11		5,40		77.20.20,64	19,52	-1,12		
	23.	23.	57.37,6			2.	8.	27,62	27,56	-0,06		5,36		77.0.32,85	32,72	-0,13		
	24.	23.	57.26,9	II.	1.5,56	2.	12.	13,44	13,30	-0,14								
	25.	23.	57.16,5			2.	15.	59,60	59,53	-0,07								
	26.	23.	57.6,7			2.	19.	46,29	46,23	-0,06		5,25		76.2.30,51	30,61	+0,10		
	28.	23.	56.48,5			2.	27.	21,15	21,13	-0,02		5,17		75.24.56,89	57,70	+0,81		
	29.	23.	56.40,1			2.	31.	9,34	9,34	0,00		5,13		75.6.33,44	32,60	-0,84		
	30.	23.	56.32,3			2.	34.	58,05	58,07	+0,02		5,09		74.48.21,94	22,29	+0,35		
May	1.	23.	56.25,0			2.	38.	47,25	47,35	+0,10		5,05		74.30.26,39	26,89	+0,50		
	2.	23.	56.18,4			2.	42.	37,19	37,17	-0,02		5,02		74.12.46,26	46,88	+0,62		
	6.	23.	55.57,2			2.	58.	2,16	2,14	-0,02		4,88		73.4.45,49	45,47	-0,02		
	7.	23.	55.53,3			3.	1.	54,81	54,84	+0,03		4,84		72.48.26,02	26,36	+0,34		
	10.	23.	55.45,4			3.	13.	36,58	36,49	-0,09		4,75		72.1.12,42	12,85	+0,43		

Greenwich Mean Solar Time of Transit of Centre.				Limb Observed.	Reduction to Transit of Centre.	R.A. of Centre from Observation.	Seconds of Tabular R.A.	Excess of Tabular R.A.	Limb Observed.	Parallax.	Assumed Semidiameter.	Geocentric N.P.D. of Centre from Observation.	Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d.	h.	m.	s.		m.	s.	h.	m.	s.		"	"	"	"
May	15.	23.	55.43,8	I.	1.7,38	3.33.17,78	17,79	+0,01	S.	4,59	15.49,30	70.48.34,58	34,32	-0,26
	17.	23.	55.47,3			3.41.14,40	14,35	-0,05		4,56		70.21.46,41	45,21	-1,20
	19.	23.	55.52,9			3.49.13,08	13,12	+0,04		4,48		69.56.16,80	16,10	-0,70
	23.	23.	56.10,5			4.5.16,98	16,93	-0,05		4,38		69.9.28,28	26,18	-2,10
	24.	23.	56.16,1			4.9.19,17	19,12	-0,05		4,35		68.58.37,43	36,87	-0,56
	30.	23.	56.59,4			4.33.41,88	41,95	+0,07		4,23		68.1.22,92	23,83	+0,91
	31.	23.	57.8,1			4.37.47,19	47,26	+0,07		4,21		67.53.10,11	10,73	+0,62
June	4.	23.	57.47,1	I.	1.8,19				S.	4,15	15.45,20	67.24.10,47	10,30	-0,17
	7.	23.	58.19,8							4,11		67.6.32,93	33,18	+0,25
	11.	23.	59.7,1			5.23.8,65	8,78	+0,13		4,07		66.48.42,74	41,66	-1,08
	12.	23.	59.19,7			5.27.17,87	17,81	-0,06		4,06		66.45.15,32	14,85	-0,47
	13.	23.	59.32,2			5.31.26,93	27,01	+0,08		4,05		66.42.15,15	12,64	-2,51
	18.	0.	0.23,8			5.48.4,85	4,94	+0,09		4,04		66.34.9,70	10,62	+0,92
	21.	0.	1.3,0							4,03		66.32.27,83	29,21	+1,38
	22.	0.	1.16,0			6.4.43,43	43,35	-0,08		4,03		66.32.45,25	44,89	-0,36
	24.	0.	1.41,7							4,03		66.34.29,78	30,68	+0,90
	27.	0.	2.19,3							4,05		66.40.16,20	14,45	-1,75
	28.	0.	2.31,5							4,06		66.43.1,35	58,25	-3,10
	29.	0.	2.43,4			6.33.47,02	46,95	-0,07		4,06		66.46.6,91	6,54	-0,37
July	1.	0.	3.6,8							4,08		66.53.37,28	36,13	-1,15
	10.	0.	4.37,2	II.	1.8,13	7.19.3,29	3,11	-0,18	S.	4,19	15.46,40	67.47.8,24	5,97	-2,57
	11.	0.	4.45,4			7.23.8,01	7,92	-0,09						
	12.	0.	4.53,2			7.27.12,37	12,30	-0,07		4,26		68.3.18,88	16,26	-2,62
	22.	0.	5.43,7			8.7.28,60	28,46	-0,14		4,44		69.46.11,71	8,60	-3,11
	23.	0.	5.45,5			8.11.27,00	26,99	-0,01		4,47		69.58.21,82	21,29	-0,53
	25.	0.	5.47,7			8.19.22,33	22,26	-0,07		4,52		70.23.45,63	46,28	+0,65
	26.	0.	5.47,9			8.23.19,01	18,99	-0,02		4,55		70.36.59,01	58,08	-0,93
	27.	0.	5.47,6	II.	1.4,76	8.27.15,35	15,10	-0,25	S.	4,58	15.51,90	70.50.30,22	29,07	-1,15
Aug.	2.	0.	5.32,3			8.50.39,30	39,11	-0,19		4,64		72.18.4,31	4,64	+0,33
	5.	0.	5.16,7			9.2.13,36	13,09	-0,27		4,86		73.5.50,97	50,63	-0,34
	8.	0.	4.55,7			9.13.41,93	41,87	-0,06		4,96		73.56.5,48	5,12	-0,36
	19.	0.	2.57,0			9.55.4,97	4,80	-0,17		5,37		77.19.11,13	11,48	+0,35
	24.	0.	1.42,4			10.13.32,98	32,85	-0,13		5,56		78.59.57,45	56,16	-1,29
	26.	0.	1.9,5			10.20.53,05	52,96	-0,09		5,64		79.41.28,27	28,86	+0,59
	27.	0.	0.52,4							5,68		80.2.31,12	30,15	-0,97
	28.	0.	0.34,9			10.28.11,47	11,47	0,00		5,69		80.23.38,41	41,05	+2,64
	29.	0.	0.17,0			10.31.50,16	50,18	+0,02		5,76		80.45.0,20	1,05	+0,85
	29.	23.	59.59,0			10.35.28,64	28,56	-0,08		5,80		81.6.30,30	30,05	-0,25
	30.	23.	59.40,6			10.39.6,73	6,62	-0,11		5,84		81.28.6,41	7,64	+1,23
Sept.	1.	23.	59.2,7	I.	1.4,27	10.46.21,79	21,87	+0,08	S.	5,92	15.55,50	82.11.46,44	47,44	+1,00
	2.	23.	58.43,4			10.49.59,06	59,10	+0,04		5,96		82.33.48,29	49,04	+0,75
	3.	23.	58.23,9			10.53.36,06	36,08	+0,02		6,00		82.55.56,78	58,04	+1,26
	4.	23.	58.4,1			10.57.12,73	12,84	+0,11		6,05		83.18.12,44	14,03	+1,59
	10.	23.	56.2,0			11.18.49,64	49,79	+0,15		6,29		85.33.57,28	59,12	+1,84
	11.	23.	55.41,5							6,35		85.56.55,68	54,92	-0,76
	12.	23.	55.20,7			11.26.1,24	1,11	-0,13		6,37		86.19.54,89	55,02	+0,13
	15.	23.	54.17,5	II.	1.4,02	11.36.47,59	47,57	-0,02	S.	6,49	16.5,60	87.29.16,58	17,42	+0,84
	18.	23.	53.14,3			11.47.33,83	33,86	+0,03		6,60		88.39.6,07	5,92	-0,15
	19.	23.	52.53,3			11.51.9,33	9,33	0,00		6,64		89.2.25,69	26,22	+0,53
	22.	23.	51.50,6			12.1.56,16	56,13	-0,03		6,75		90.12.33,71	35,12	+1,41
	24.	23.	51.9,3			12.9.7,85	7,91	+0,06		6,83		90.59.24,82	24,42	-0,40
	25.	23.	50.49,0			12.12.44,05	44,04	-0,01		6,87		91.22.49,49	49,02	-0,47
	26.	23.	50.29,0			12.16.20,49	20,36	-0,13		6,90		91.46.11,05	13,32	+2,27
	27.	23.	50.9,0			12.19.57,06	56,89	-0,17		6,94		92.9.35,78	36,82	+1,04
	29.	23.	49.29,8			12.27.10,84	10,71	-0,13		7,01		92.56.20,63	20,32	-0,31
Oct.	1.	23.	48.52,0			12.34.26,03	25,68	-0,35		7,08		93.42.57,08	56,82	-0,26
	3.	23.	48.15,1			12.41.42,11	42,00	-0,11		7,15		94.29.22,49	23,62	+1,13
	8.	23.	46.50,2			12.59.59,75	59,69	-0,06		7,31		96.24.31,66	28,63	-3,03
	9.	23.	46.34,6			13.3.40,66	40,57	-0,09		7,34		96.47.16,50	16,03	-0,47
	10.	23.	46.19,3			13.7.21,90	21,92	+0,02		7,37		97.9.55,77	57,93	+2,16
	11.	23.	46.4,8							7,40		97.32.34,25	33,93	-0,32
	16.	23.	44.59,5			13.29.41,16	41,01	-0,15		7,55		99.23.53,23	52,44	-0,79
	18.	23.	44.37,3	II.	1.7,50				N.	7,59	16.8,70	100.7.29,55	29,05	-0,50
	22.	23.	44.0,6			13.52.21,39	21,22	-0,17		7,71		101.32.51,12	51,06	-0,06
	30.	23.	43.20,9			14.23.14,08	13,86	-0,22		7,89		104.14.45,87	45,48	-0,39
Nov.	5.	23.	43.24,6			14.46.57,12	56,89	-0,23		8,03		106.6.49,07	48,41	-0,66
	6.	23.	43.28,0			14.50.57,01	57,01	0,00		8,05		106.24.36,00	34,81	-1,19
	7.	23.	43.32,5			14.54.58,16	58,00	-0,16		8,06		106.42.4,55	4,72	+0,17
	19.	23.	45.31,1			15.44.15,72	15,61	-0,11		8,24		109.48.0,69	1,88	+1,19
	20.	23.	45.46,5			15.48.27,67	27,39	-0,28		8,25		110.1.21,01	19,69	-1,32

RIGHT ASCENSIONS AND NORTH POLAR DISTANCES

Greenwich Mean Solar Time of Transit of Centre.	Limb Observed.	Reduction to Transit of Centre.	R.A. of Centre from Observation.	Seconds of Tabular R.A.	Excess of Tabular R.A.	Limb Observed.	Parallax.	Assumed Semidiameter.	Geocentric N.P.D. of Centre from Observation.	Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d. h. m. s.		m. s.	h. m. s.	s.	s.		"	" "	° ' "	"	"
Nov. 25. 23. 47. 13,8			16. 9. 37,99	37,88	-0,11		8,31		111. 2. 13,74	11,32	-2,42
26. 23. 47. 33,6			16. 13. 54,44	54,23	-0,21		8,32		111. 13. 13,09	11,93	-1,16
Dec. 3. 23. 50. 11,1			16. 44. 8,25	8,10	-0,15		8,37		112. 18. 48,66	46,17	-2,49
4. 23. 50. 36,0			16. 48. 29,80	29,74	-0,06		8,38		112. 26. 27,50	26,18	-1,32
5. 23. 51. 1,8			16. 52. 52,21	51,94	-0,27		8,38		112. 33. 42,08	39,99	-2,09
19. 23. 57. 39,6			17. 54. 42,93	42,92	-0,01		8,43		113. 27. 10,30	9,49	-0,81
28. 0. 1. 38,0							8,42		113. 16. 36,22	34,76	-1,46

RIGHT ASCENSIONS AND NORTH POLAR DISTANCES OF THE MOON.

Greenwich Mean Solar Time of Transit of Centre.	Limb Observed.	Reduction to Transit of Centre.	R.A. of Centre from Observation.	Seconds of Tabular R.A.	Excess of Tabular R.A.	Limb Observed.	Parallax.	Assumed Semidiameter.	Geocentric N.P.D. of Centre from Observation.	Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d. h. m. s.		m. s.	h. m. s.	s.	s.		"	" "	° ' "	"	"
Jan. 1. 8. 52. 51,0	I.	1. 6,41	3. 35. 41,75	41,89	+0,14	S.	28. 0,77	14. 52,68	68. 16. 1,32	4,97	+ 3,65
5. 12. 18. 15,6	II.	1. 8,01	7. 17. 26,39	26,84	+0,45	N.	30. 0,12	15. 22,89	69. 59. 6,34	9,59	+ 3,25
7. 13. 59. 1,2						S.	37. 17,42	15. 39,86	77. 43. 54,51	54,45	- 0,06
14. 19. 58. 16,0						S.	57. 17,70	16. 14,26	111. 37. 52,29	51,32	- 0,97
24. 3. 48. 1,8	I.	1. 2,32	0. 0. 47,38	47,13	-0,25	S.	40. 21,47	15. 1,10	84. 22. 19,67	22,54	+ 2,87
26. 5. 13. 57,3	I.	1. 3,28	1. 34. 46,07	46,00	-0,07	S.	33. 39,84	14. 49,66	75. 33. 54,68	58,30	+ 3,62
27. 5. 58. 33,7	I.	1. 4,40	2. 23. 26,37	26,55	+0,18	S.	30. 53,96	14. 48,30	72. 1. 56,34	57,11	+ 0,77
31. 9. 15. 34,7	I.	1. 8,50	5. 56. 45,90	45,88	-0,02	S.	27. 41,98	15. 11,55	67. 10. 59,16	60,44	+ 1,28
Feb. 1. 10. 7. 47,2	I.	1. 8,48	6. 53. 3,56	3,44	-0,12	N.	29. 3,33	15. 22,25	68. 53. 23,60	27,82	+ 4,22
2. 10. 59. 43,6	I.	1. 8,04	7. 49. 5,08	5,23	+0,15	N.	31. 53,03	15. 33,46	71. 48. 27,79	32,08	+ 4,29
3. 11. 50. 52,9	I.	1. 7,41	8. 44. 19,29	19,49	+0,20	S.	35. 57,82	15. 44,38	75. 48. 24,33	25,41	+ 1,08
5. 13. 30. 44,6	II.	1. 6,67	10. 32. 20,53	20,91	+0,38	S.	44. 20,18	16. 2,00	86. 7. 52,56	51,06	- 1,50
24. 4. 38. 4,6	I.	1. 4,95	2. 53. 7,49	7,28	-0,21	S.	29. 41,73	14. 47,62	70. 32. 43,67	44,22	+ 0,55
Mar. 1. 9. 38. 17,9	I.	1. 7,71	8. 17. 49,51	49,27	-0,24	N.	33. 48,30	15. 39,70	73. 52. 9,21	13,42	+ 4,21
2. 10. 29. 0,8	I.	1. 7,37	9. 12. 37,31	37,09	-0,22	N.	37. 51,86	15. 53,47	78. 17. 51,24	51,83	+ 0,59
5. 13. 1. 40,0	II.	1. 8,34	11. 57. 31,19	31,79	+0,60	S.	50. 52,95	16. 22,73	95. 3. 28,35	23,42	- 4,93
6. 13. 54. 46,0	II.	1. 9,56	12. 54. 42,48	43,22	+0,74	S.	53. 53,60	16. 25,63	100. 39. 17,30	11,77	- 5,53
11. 18. 44. 17,8	II.	1. 11,85	18. 4. 44,55	45,16	+0,61	S.	56. 24,11	15. 56,02	112. 19. 52,75	48,72	- 4,03
12. 19. 40. 17,3	II.	1. 10,06	19. 4. 49,84	50,22	+0,38						
26. 5. 46. 36,0	I.	1. 7,29	6. 4. 3,39	3,28	-0,11	S.	27. 53,44	15. 0,83	67. 48. 28,32	33,05	+ 4,73
28. 7. 26. 36,0	I.	1. 7,11	7. 52. 12,81	12,81	0,00	N.	32. 3,51	15. 24,85	72. 22. 47,42	52,80	+ 5,38
29. 8. 16. 15,2	I.	1. 6,92	8. 45. 56,77	56,65	-0,12	N.	35. 42,88	15. 39,97	76. 13. 50,91	55,87	+ 4,96
30. 9. 5. 49,9	I.	1. 6,93	9. 39. 36,16	35,98	-0,18	N.	39. 59,29	15. 55,84	80. 57. 4,46	7,01	+ 2,55
April 1. 10. 46. 54,7	I.	1. 8,20	11. 28. 50,66	50,56	-0,10	N.	48. 54,14	16. 24,18	92. 5. 38,70	41,17	+ 2,47
2. 11. 39. 53,9	I.	1. 9,57	12. 25. 55,12	55,18	+0,06	S.	52. 58,14	16. 33,55	97. 52. 33,22	34,96	+ 1,74
3. 12. 35. 26,6	II.	1. 11,28	13. 25. 33,50	34,07	+0,57	S.	55. 45,84	16. 38,32	103. 14. 46,55	44,99	- 1,56
9. 18. 29. 51,7	II.	1. 8,85	19. 44. 36,20	36,49	+0,29	N.	54. 19,30	15. 45,11	107. 59. 16,90	4,92	- 11,98
10. 19. 20. 37,7	II.	1. 6,51	20. 39. 27,01	27,03	+0,02	N.	52. 14,49	15. 32,88	104. 11. 37,68	29,27	- 8,41
23. 4. 30. 31,9	I.	1. 6,60	6. 38. 10,26	10,17	-0,09	N.	28. 24,36	14. 59,25	68. 59. 13,71	14,37	+ 0,66
24. 5. 19. 26,7	I.	1. 6,31	7. 31. 9,61	9,67	+0,06	N.	30. 41,53	15. 9,22	71. 22. 6,64	10,86	+ 4,22
25. 6. 7. 48,8	I.	1. 6,01	8. 23. 36,24	36,18	-0,06	N.	33. 50,54	15. 22,24	74. 43. 58,80	62,45	+ 3,65
27. 7. 43. 56,4	I.	1. 6,19	10. 7. 52,71	52,63	-0,08	N.	41. 58,84	15. 52,44	83. 53. 22,49	28,28	+ 5,79
29. 9. 23. 46,9	I.	1. 8,41	11. 55. 52,71	52,76	+0,05	N.	50. 35,42	16. 23,85	94. 58. 55,16	60,74	+ 5,58
30. 10. 17. 21,7	I.	1. 10,32	12. 53. 32,86	33,09	+0,23	N.	54. 8,20	16. 36,00	100. 31. 7,48	12,67	+ 5,19
May 1. 11. 14. 23,4	I.	1. 12,46	13. 54. 40,53	41,15	+0,62	N.	56. 45,14	16. 43,53	105. 29. 26,98	32,16	+ 5,18
2. 12. 14. 55,9	II.	1. 14,36	14. 59. 19,45	20,53	+1,08	S.	58. 29,35	16. 45,67	109. 24. 46,77	49,42	+ 2,65
10. 19. 35. 21,2	II.	1. 2,63	22. 52. 29,60	29,56	-0,04						
20. 2. 27. 14,7	I.	1. 6,39	6. 20. 59,71	60,04	+0,33						
23. 4. 51. 13,8	I.	1. 5,07	8. 57. 12,23	12,45	+0,22	N.	35. 55,55	15. 20,33	77. 29. 0,58	1,13	+ 0,55
24. 5. 37. 57,2	I.	1. 5,03	9. 47. 59,83	60,09	+0,26	N.	39. 50,14	15. 33,17	82. 3. 34,19	35,62	+ 1,43
25. 6. 24. 56,1	I.	1. 5,51	10. 39. 3,00	3,20	+0,20	N.	43. 59,28	15. 47,52	87. 9. 21,75	23,71	+ 1,96
27. 8. 3. 29,5	I.	1. 8,35	12. 25. 45,71	45,77	+0,06	N.	51. 52,34	16. 17,22	98. 0. 13,15	15,25	+ 2,10
June 22. 5. 9. 0,5						N.	46. 7,60	15. 45,56	90. 40. 26,89	29,99	+ 3,10
24. 6. 47. 31,5						N.	52. 58,36	16. 9,53	101. 7. 20,11	20,36	+ 0,25
27. 9. 40. 11,9						N.	58. 21,79	16. 34,19	111. 47. 39,47	30,64	- 8,83

March 11. The correction +0",03 has been applied for defect of illumination of the S.L.

May 1. The correction -0",11 has been applied for defect of illumination of the N.L.

Greenwich Mean Solar Time of Transit of Centre.	Limb Observed.	Reduction to Transit of Centre.	R.A. of Centre from Observation.	Seconds of Tabular R.A.	Excess of Tabular R.A.	Limb Observed.	Parallax.	Assumed Semidiameter.	Geocentric N.P.D. of Centre from Observation.	Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d. h. m. s.		m. s.	h. m. s.	s.	s.		" "	" "	° ' "	" "	" "
June 29. 11. 46. 15,7	I.	1. 14,27	18. 19. 14,87	15,08	+ 0,21	{N. S.	58. 7,27 58. 16,83	16. 30,19 16. 30,91	111. 31. 36,61 111. 31. 35,71	30,80 30,80	- 5,81 - 4,91
July 10. 20. 40. 2,9	II.	1. 5,90	3. 57. 56,01	55,99	- 0,02	N.	54. 4,44	16. 5,78	104. 8. 52,98	55,99	- 3,01
22. 5. 35. 46,1	I.	1. 9,03	13. 38. 35,27	25,84	+ 0,57	N.	55. 56,86	16. 12,69	108. 6. 6,62	7,32	+ 0,70
23. 6. 30. 27,1	I.	1. 11,08	14. 37. 11,77	12,37	+ 0,60	N.	57. 9,78	16. 18,07	110. 56. 8,86	8,48	- 0,38
24. 7. 28. 23,1	I.	1. 12,89	15. 39. 13,88	14,38	+ 0,50	S.	57. 9,60	16. 18,21	110. 19. 18,20	10,70	- 7,50
27. 10. 30. 33,5	I.	1. 12,60	18. 53. 43,80	44,18	+ 0,38	N.	53. 21,54	16. 2,22	102. 54. 19,20	9,22	- 9,98
29. 12. 22. 25,4	II.	1. 8,39	20. 53. 47,24	47,92	+ 0,68	N.	28. 14,18	14. 48,14	69. 12. 36,61	36,16	- 0,45
Aug. 6. 18. 33. 53,1	II.	1. 4,78	3. 37. 48,39	48,47	+ 0,08	N.	27. 12,14	14. 49,20	67. 54. 46,73	44,17	- 2,56
7. 19. 22. 10,9	II.	1. 6,33	4. 30. 10,68	10,64	- 0,04	N.					
8. 20. 11. 28,5	II.	1. 6,77	5. 23. 32,96	32,86	- 0,10	N.					
26. 11. 3. 21,7	I.	1. 6,71	21. 24. 54,08	54,82	+ 0,74	N.	51. 27,01	15. 49,18	100. 14. 29,34	19,00	- 10,34
27. 11. 52. 4,0	I.	1. 5,17	22. 17. 40,96	41,84	+ 0,88	{N. S.	48. 27,65 48. 44,50	15. 39,78 15. 39,78	95. 16. 12,05 95. 16. 10,23	2,30 2,30	- 9,75 - 7,93
28. 12. 38. 46,8	II.	1. 4,12	23. 8. 27,92	29,06	+ 1,14	N.	45. 1,12	15. 29,54	90. 8. 52,83	42,41	- 10,42
29. 13. 24. 16,2	II.	1. 3,59	23. 58. 1,39	2,24	+ 0,85	N.	41. 20,64	15. 19,10	85. 8. 34,00	25,87	- 8,13
Sept. 5. 18. 52. 36,9	II.	1. 6,57	5. 54. 51,85	51,74	- 0,11	N.	27. 38,71	14. 54,30	68. 15. 26,77	29,20	+ 2,43
19. 6. 15. 23,8	I.	1. 12,12	18. 10. 46,10	46,25	+ 0,15	S.	56. 43,32	16. 6,10	111. 18. 10,94	11,31	+ 0,37
20. 7. 12. 22,3	I.	1. 10,52	19. 11. 50,59	50,67	+ 0,08	S.	55. 42,26	15. 59,26	109. 11. 37,99	37,58	- 0,41
21. 8. 6. 31,2	I.	1. 8,58	20. 10. 4,88	5,27	+ 0,39	S.	54. 10,37	15. 51,77	105. 55. 30,19	24,18	- 6,01
24. 10. 32. 52,8	I.	1. 3,99	22. 48. 40,16	40,94	+ 0,78	S.	46. 22,19	15. 26,99	92. 8. 15,25	7,81	- 7,44
25. 11. 18. 17,0	I.	1. 3,40	23. 38. 8,37	9,32	+ 0,95	N.	42. 38,13	15. 18,52	87. 9. 50,46	44,21	- 6,25
26. 12. 3. 12,4	II.	1. 3,30	0. 27. 7,69	8,85	+ 1,16	N.	39. 5,56	15. 10,14	82. 24. 43,03	35,98	- 7,05
27. 12. 48. 18,0	N.					N.	35. 40,41	15. 2,51	78. 5. 11,35	5,07	- 6,28
28. 13. 33. 58,8	II.	1. 4,18	2. 6. 2,16	2,85	+ 0,69	N.	32. 36,37	14. 55,94	74. 22. 8,04	3,89	- 4,15
Oct. 6. 19. 57. 8,6	II.	1. 5,24	9. 1. 47,29	47,91	+ 0,62	S.	36. 53,47	15. 24,42	78. 1. 57,36	63,28	+ 5,92
Nov. 20. 8. 42. 32,5	I.	1. 2,94	0. 42. 45,38	45,57	+ 0,19	S.	38. 1,96	15. 1,96	80. 53. 28,84	29,50	+ 0,66
21. 9. 27. 0,5	I.	1. 3,35	1. 31. 17,22	17,48	+ 0,26	S.	34. 50,47	14. 55,04	76. 51. 51,73	52,57	+ 0,84
23. 10. 59. 2,5	I.	1. 4,78	3. 11. 27,42	27,66	+ 0,24	S.	29. 51,52	14. 46,13	70. 48. 44,75	45,37	+ 0,62
26. 13. 23. 44,2	II.	1. 5,64	5. 48. 22,60	22,84	+ 0,24	N.	27. 36,95	14. 44,39	68. 35. 55,42	54,12	- 1,30
Dec. 4. 19. 36. 47,1	II.	1. 7,35	12. 33. 59,19	59,45	+ 0,26	S.	51. 32,78	16. 3,07	98. 19. 19,81	20,93	+ 1,12
5. 20. 29. 17,8	II.	1. 9,72	13. 30. 35,06	35,38	+ 0,32	S.	54. 41,76	16. 20,62	103. 4. 62,43	54,59	- 7,84
19. 8. 10. 11,7	I.	1. 3,89	2. 4. 39,41	39,74	+ 0,33	S.	32. 58,55	14. 52,76	74. 30. 7,68	11,72	+ 4,04
20. 8. 56. 12,4	I.	1. 4,55	2. 54. 44,18	44,47	+ 0,29	S.	30. 32,18	14. 47,68	71. 36. 3,11	6,25	+ 3,14
21. 9. 43. 22,2	I.	1. 5,20	3. 45. 58,30	58,16	- 0,14	S.	28. 47,92	14. 44,67	69. 32. 55,58	58,26	+ 2,68

June 29. The observation of S.L. has been corrected by + 0",08 for defect of illumination.

Aug. 27. The observation of S.L. has been corrected by + 1",96 for defect of illumination.

Sept. 19. By calculation the S.L. was found to be full.

Nov. 26. The correction - 0",47 has been applied for defect of illumination of the N.L.

RIGHT ASCENSIONS AND NORTH POLAR DISTANCES OF MERCURY.

Greenwich Mean Solar Time of Transit of Centre.	Limb Observed.	Reduction to Transit of Centre.	R.A. of Centre from Observation.	Seconds of Tabular R.A.	Excess of Tabular R.A.	Parallax.	Geocentric N.P.D. of Centre from Observation.	Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d. h. m. s.		s.	h. m. s.	s.	s.	"	° ' "	" "	" "
Jan. 6. 1. 18. 16,9	I.	0,20	20. 19. 35,81	35,51	- 0,30	7,10	111. 19. 47,26	48,33	+ 1,07
11. 1. 26. 10,8	I.	0,22	20. 47. 13,78	13,60	- 0,18	7,80	108. 56. 33,52	32,59	- 0,93
13. 1. 27. 8,5						8,17	107. 56. 29,01	27,39	- 1,62
15. 1. 26. 19,0	I.	0,24	21. 3. 8,21	7,73	- 0,48	8,59	106. 58. 6,41	5,16	- 1,25
20. 1. 13. 50,0	I.	0,28	21. 10. 19,98	18,90	- 1,08	9,87	104. 59. 26,71	24,29	- 2,42
Feb. 15. 22. 31. 24,1	II.	0,27	20. 13. 54,40	53,84	- 0,56				
26. 22. 30. 31,6	II.	0,23	20. 56. 23,81	23,53	- 0,28	7,91	107. 57. 45,45	49,98	+ 4,53
27. 22. 31. 27,8	II.	0,22	21. 1. 16,72	16,41	- 0,31	7,79	107. 46. 22,24	27,80	+ 5,56
29. 22. 33. 40,0	II.	0,22	21. 11. 22,40	22,13	- 0,27	7,56	107. 19. 35,68	41,44	+ 5,76
Mar. 5. 22. 40. 45,3	II.	0,20	21. 38. 11,62	11,52	- 0,10	7,05	105. 49. 20,99	24,85	+ 3,86
7. 22. 44. 6,0	II.	0,20	21. 49. 26,01	25,93	- 0,08				
20. 23. 11. 2,9	II.	0,17	23. 7. 42,52	42,55	+ 0,03	5,79	98. 4. 53,58	57,06	+ 3,48
25. 23. 23. 40,0						5,42	94. 28. 56,69	59,25	+ 2,56
27. 23. 29. 7,1	II.	0,17	23. 53. 25,51	25,54	+ 0,03	5,28	92. 54. 42,89	42,89	0,00
28. 23. 31. 56,4						5,21	92. 5. 58,34	59,21	+ 0,87

Greenwich Mean Solar Time of Transit of Centre.	Limb Observed.	Reduction to Transit of Centre.	R.A. of Centre from Observation.	Seconds of Tabular R.A.	Excess of Tabular R.A.	Parallax.	Geocentric N.P.D. of Centre from Observation.	Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d. h. m. s.		s.	h. m. s.	s.	s.	"	° ' "	"	"
Mar. 29. 23. 34. 49,6	II.	0,16	0. 7. 2,04	2,18	+ 0,14	5,14	91. 16. 14,59	14,42	- 0,17
31. 23. 40. 48,7	II.	0,16	0. 20. 55,29	55,51	+ 0,22	5,00	89. 33. 47,90	51,35	+ 3,45
April 1. 23. 43. 54,8	II.	0,16	0. 27. 58,45	58,79	+ 0,34				
2. 23. 47. 5,4	II.	0,16	0. 35. 6,09	6,60	+ 0,51	4,87	87. 47. 58,91	58,18	- 0,73
3. 23. 50. 21,0	II.	0,16	0. 42. 18,77	19,01	+ 0,24	4,80	86. 53. 54,47	52,49	- 1,98
10. 0. 11. 27,2	I.	0,17	1. 27. 7,80	7,88	+ 0,08				
11. 0. 15. 11,9	I.	0,17	1. 34. 49,66	49,81	+ 0,15	4,48	81. 23. 27,00	26,51	- 0,49
23. 0. 59. 23,9	I.	0,20	3. 6. 27,57	27,96	+ 0,39	4,14	70. 36. 34,07	30,71	- 3,36
24. 1. 2. 27,8	I.	0,20	3. 13. 28,51	28,88	+ 0,37	4,16	70. 0. 21,26	16,57	- 4,69
25. 1. 5. 20,7	I.	0,21	3. 20. 18,38	18,74	+ 0,36	4,18	69. 26. 36,28	32,13	- 4,15
26. 1. 8. 1,4	I.	0,22	3. 26. 56,11	56,58	+ 0,47	4,21	68. 55. 22,67	19,19	- 3,48
27. 1. 10. 29,6	I.	0,23	3. 33. 21,26	21,49	+ 0,23	4,25	68. 40. 46,13	38,65	- 4,48
29. 1. 14. 43,5	I.	0,24	3. 45. 28,97	29,21	+ 0,24	4,35	67. 37. 0,66	52,66	- 8,00
30. 1. 16. 28,0	I.	0,25	3. 51. 10,29	10,51	+ 0,22	4,41	67. 15. 46,16	44,03	- 2,13
May 1. 1. 17. 56,5	I.	0,26	3. 56. 35,58	35,86	+ 0,28	4,47	66. 57. 3,44	2,29	- 1,15
2. 1. 19. 8,5	I.	0,26	4. 1. 44,35	44,63	+ 0,28	4,55	66. 40. 46,69	44,75	- 1,94
3. 1. 20. 3,4	I.	0,27	4. 6. 35,99	36,17	+ 0,18	4,63	66. 26. 48,91	47,71	- 1,20
13. 1. 11. 43,1	I.	0,34	4. 37. 39,81	40,09	+ 0,28				
June 11. 22. 45. 9,2						7,57	73. 17. 51,32	58,83	+ 7,51
12. 22. 42. 4,9	II.	0,34	4. 9. 50,35	50,26	- 0,09	7,40	73. 14. 46,88	53,67	+ 6,79
28. 22. 33. 2,5						4,58	69. 21. 14,58	14,22	- 0,36
July 14. 23. 34. 22,3	II.	0,32	7. 8. 26,15	27,10	+ 0,95	3,18	66. 31. 25,43	24,20	- 1,23
15. 23. 39. 41,1						3,17	66. 38. 59,59	58,35	- 1,24
Aug. 3. 0. 59. 28,6	I.	0,18	9. 48. 41,00	41,25	+ 0,25				
7. 1. 10. 34,1	I.	0,18	10. 15. 34,56	34,67	+ 0,11	4,33	77. 55. 21,43	24,11	+ 2,68
19. 1. 31. 19,7	I.	0,19	11. 23. 42,24	42,34	+ 0,10	5,63	86. 25. 5,19	9,82	+ 4,63
20. 1. 32. 19,0	I.	0,19	11. 28. 38,24	38,27	+ 0,03	5,75	87. 6. 11,81	18,62	+ 6,81
27. 1. 36. 9,7	I.	0,21	12. 0. 5,45	5,43	- 0,02				
30. 1. 36. 3,4	I.	0,22	12. 11. 48,77	48,62	- 0,15	7,13	93. 25. 54,69	59,54	+ 4,85
31. 1. 35. 45,3	I.	0,22	12. 15. 27,19	27,18	- 0,01	7,29	93. 59. 30,86	35,46	+ 4,60
Sept. 2. 1. 34. 43,4	I.	0,23	12. 22. 18,18	18,19	+ 0,01				
6. 1. 30. 40,2						8,31	96. 55. 48,46	54,99	+ 6,53
10. 1. 23. 19,4	I.	0,26	12. 42. 24,79	24,51	- 0,28	9,07	98. 21. 23,70	27,42	+ 3,72
16. 1. 3. 47,8	I.	0,30	12. 46. 29,30	28,87	- 0,43	10,24	99. 16. 26,22	30,01	+ 3,79
Oct. 6. 22. 52. 54,6	II.	0,27	11. 58. 2,23	2,04	- 0,19	8,44	89. 18. 46,16	39,96	- 6,20
10. 22. 43. 21,5	II.	0,24	12. 4. 13,78	13,88	+ 0,10	7,41	88. 59. 9,48	5,11	- 4,37
16. 22. 43. 13,4	II.	0,21	12. 27. 44,94	45,39	+ 0,45	6,41	90. 49. 18,72	21,23	+ 2,51
Nov. 26. 0. 11. 38,1	I.	0,17	16. 34. 6,33	6,16	- 0,17				
27. 0. 14. 21,9	I.	0,17	16. 40. 47,12	47,11	- 0,01	5,80	113. 40. 10,00	11,01	+ 1,01
Dec. 6. 0. 39. 55,1						6,13	115. 27. 56,80	60,00	+ 3,20
20. 1. 17. 31,6	I.	0,21	19. 14. 48,08	48,13	+ 0,05	7,25	114. 25. 4,50	5,64	+ 1,14

RIGHT ASCENSIONS AND NORTH POLAR DISTANCES OF VENUS.

Greenwich Mean Solar Time of Transit of Centre.	Limb Observed.	Reduction to Transit of Centre.	R.A. of Centre from Observation.	Seconds of Tabular R.A.	Excess of Tabular R.A.	Limb Observed.	Parallax.	Assumed Semi- diameter.	Geocentric N.P.D. of Centre from Observation.	Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d. h. m. s.		s.	h. m. s.	s.	s.		"	"	° ' "	"	"
Jan. 10. 1. 49. 50,5	I.	0,45	21. 7. 0,82	0,69	- 0,13		5,36		108. 16. 32,38	31,75	- 0,63
11. 1. 50. 54,7	I.	0,45	21. 12. 1,71	1,46	- 0,25		5,38		107. 54. 45,00	43,56	- 1,44
13. 1. 52. 58,6							5,38		107. 9. 38,27	38,58	+ 0,31
15. 1. 54. 57,1	I.	0,45	21. 31. 51,01	50,94	- 0,07		5,58		106. 22. 43,60	39,89	- 3,71
17. 1. 56. 50,6	I.	0,45	21. 41. 37,94	37,62	- 0,32		5,38		105. 33. 55,53	54,21	- 1,32
18. 1. 57. 45,0	I.	0,45	21. 46. 29,04	28,98	- 0,06		5,38		105. 8. 55,10	53,21	- 1,89
20. 1. 59. 30,5	I.	0,45	21. 56. 7,94	7,82	- 0,12		5,38		104. 17. 40,35	38,63	- 1,72
24. 2. 2. 46,2	I.	0,46	22. 15. 10,47	10,43	- 0,04		5,37		102. 30. 45,35	42,95	- 2,40
Feb. 1. 2. 8. 23,2	I.	0,47	22. 52. 20,77	20,60	- 0,17		5,33		98. 42. 10,20	6,08	- 4,12
5. 2. 10. 47,9	I.	0,47	23. 10. 32,12	31,99	- 0,13		5,29		96. 42. 10,08	5,70	- 4,38
8. 2. 12. 28,0	I.	0,47	23. 24. 2,19	2,11	- 0,08		5,26		95. 10. 19,58	15,60	- 3,98
13. 2. 15. 2,1	I.	0,48	23. 46. 19,48	19,45	- 0,03		5,20		92. 34. 48,80	42,71	- 6,09
16. 2. 16. 28,8	I.	0,48	23. 59. 36,06	35,95	- 0,11		5,16		91. 0. 30,62	26,12	- 4,50
20. 2. 18. 19,5	I.	0,48	0. 17. 13,30	13,23	- 0,07						
27. 2. 21. 27,0	I.	0,49	0. 47. 57,16	57,22	+ 0,06		4,98		85. 14. 51,32	43,31	- 8,01
28. 2. 21. 53,8	I.	0,49	0. 52. 20,54	20,58	+ 0,04		4,96		84. 43. 46,00	39,71	- 6,29

Greenwich Mean Solar Time of Transit of Centre.				Limb Observed.	Reduction to Transit of Centre.	R.A. of Centre from Observation.			Seconds of Tabular R.A.	Excess of Tabular R.A.	Limb Observed.	Parallax.	Assumed Semi- diameter.	Geocentric N.P.D. of Centre from Observation.			Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d.	h.	m.	s.		s.	h.	m.	s.	s.	s.		"	"	°	'	"	"	"
Feb.	29.	2.22.	20,7	I.	0,50	0.56.	44,08		44,03	- 0,05		4,94		84.12.	48,28		42,91	- 5,37
Mar.	1.	2.22.	47,3	I.	0,50	1. 1.	7,37		7,59	+ 0,22		4,92		83.41.	57,81		53,40	- 4,41
	2.	2.23.	14,6	I.	0,50	1. 5.	31,30		31,32	+ 0,02		4,90		83.11.	17,82		12,20	- 5,62
	13.	2.28.	33,0	I.	0,55	1.54.	12,65		12,69	+ 0,04		4,68		77.46.	8,75		1,76	- 6,99
	20.	2.32.	26,7	I.	0,58	2.25.	42,81		42,92	+ 0,11		4,54		74.35.	38,54		33,33	- 5,21
	21.	2.33.	2,5	I.	0,59	2.30.	15,26		15,47	+ 0,21		4,52		74. 9.	47,33		41,22	- 6,11
	26.	2.36.	12,0	I.	0,61	2.53.	8,07		8,19	+ 0,12		4,43		72. 6.	10,72		6,89	- 3,83
	28.	2.37.	32,4	I.	0,61	3. 2.	21,77		21,92	+ 0,15		4,40		71.19.	39,50		35,47	- 4,03
	29.	2.38.	3,5	I.	0,62	3. 6.	59,58		59,77	+ 0,19		4,38		70.57.	4,74		59,77	- 4,97
	30.	2.38.	55,2	I.	0,62	3.11.	37,94		38,26	+ 0,32	S.	4,37	8,76	70.34.	56,38		51,56	- 4,82
Apr.	1.	2.40.	20,8	I.	0,62	3.20.	56,81		57,14	+ 0,33		4,34		69.52.	3,93		59,74	- 4,19
	2.	2.41.	4,6	I.	0,63	3.25.	37,31		37,49	+ 0,18		4,33		69.31.	20,95		17,44	- 3,51
	3.	2.41.	48,7	I.	0,64	3.30.	18,14		18,42	+ 0,28		4,32		69.11.	8,68		4,83	- 3,85
	9.	2.46.	25,5	I.	0,67	3.58.	35,00		35,31	+ 0,31		4,26		67.20.	49,51		46,07	- 3,44
	10.	2.47.	13,3	I.	0,68	4. 3.	19,40		19,74	+ 0,34		4,26		67. 4.	19,64		16,97	- 2,67
	12.	2.48.	50,0	I.	0,70	4.12.	49,55		49,72	+ 0,17		4,26		66.33.	3,32		0,95	- 2,37
	13.	2.49.	38,6								N.	4,26	9,70	66.18.	17,35		14,84	- 2,51
	17.	2.52.	55,5									4,27		65.25.	4,96		4,80	- 0,16
	20.	2.55.	23,6	I.	0,74	4.50.	56,58		56,99	+ 0,41		4,29		64.51.	32,91		33,47	+ 0,56
	22.	2.57.	1,3	I.	0,76	5. 0.	27,67		28,23	+ 0,56		4,32		64.32.	15,67		17,75	+ 2,08
	23.	2.57.	49,7	I.	0,76	5. 5.	12,83		13,37	+ 0,54		4,34		64.23.	34,64		35,84	+ 1,20
	24.	2.58.	37,8	I.	0,77	5. 9.	57,56		58,08	+ 0,52		4,35		64.15.	30,57		31,63	+ 1,06
	25.	2.59.	25,3	I.	0,77	5.14.	41,78		42,29	+ 0,51		4,38		64. 8.	3,64		5,12	+ 1,48
	26.	3. 0.	12,3	I.	0,78	5.19.	25,42		25,91	+ 0,49		4,40		64. 1.	12,54		16,31	+ 3,77
	27.	3. 0.	58,7	I.	0,78	5.24.	8,49		8,85	+ 0,36		4,42		63.55.	3,37		5,20	+ 1,83
	29.	3. 2.	28,7	I.	0,80	5.33.	31,89		32,36	+ 0,47		4,48		63.44.	33,03		36,27	+ 3,24
	30.	3. 3.	12,4	I.	0,82	5.38.	12,25		12,75	+ 0,50		4,51		63.40.	13,71		18,27	+ 4,56
May	1.	3. 3.	55,1	I.	0,82	5.42.	51,61		52,13	+ 0,52		4,54		63.36.	33,32		37,55	+ 4,23
	2.	3. 4.	36,7	I.	0,83	5.47.	29,90		30,39	+ 0,49		4,58		63.33.	30,18		34,24	+ 4,06
	3.	3. 5.	17,1	I.	0,84	5.52.	6,94		7,47	+ 0,53		4,62		63.31.	4,30		8,04	+ 3,74
	4.	3. 5.	56,4	I.	0,85	5.56.	42,88		43,27	+ 0,39		4,66		63.29.	13,98		18,73	+ 4,75
	6.	3. 7.	10,3	I.	0,86	6. 5.	50,11		50,62	+ 0,51		4,75		63.27.	23,57		30,11	+ 6,54
	15.	3.11.	16,2									5,30		63.48.	17,87		25,62	+ 7,75
	20.	3.12.	13,0	I.	1,00	7. 6.	5,48		5,92	+ 0,44		5,73		64.18.	57,65		6,98	+ 9,33
	21.	3.12.	16,0	I.	1,01	7.10.	4,98		5,45	+ 0,47		5,82		64.26.	32,97		44,08	+ 11,11
	23.	3.12.	12,6	I.	1,03	7.17.	54,69		55,13	+ 0,44		6,03		64.43.	9,07		20,96	+ 11,89
	24.	3.12.	6,0	I.	1,04	7.21.	44,65		45,09	+ 0,44		6,14		64.52.	9,29		19,25	+ 9,96
	25.	3.11.	56,0	I.	1,05	7.25.	31,22		31,62	+ 0,40		6,25		65. 1.	31,76		42,94	+ 11,18
	31.	3. 9.	37,9	I.	1,13	7.46.	52,01		52,51	+ 0,50		7,01		66. 5.	57,07		10,11	+ 13,04
June	1.	3. 9.	0,9	I.	1,15	7.50.	11,49		11,82	+ 0,33		7,16		66.17.	54,15		7,00	+ 12,85
	10.	2.59.	55,0									8,68		68.16.	58,26		12,57	+ 14,31
	11.	2.58.	28,3	I.	1,29	8.19.	2,70		3,02	+ 0,32		8,87		68.31.	8,83		24,37	+ 15,54
	12.	2.56.	55,8									9,08		68.45.	27,38		43,66	+ 16,28
	14.	2.53.	32,9									9,50		69.14.	24,45		39,76	+ 15,31
	21.	2.38.	13,9	I.	1,49	8.38.	10,58		10,87	+ 0,29								
	22.	2.35.	33,2	I.	1,51	8.39.	26,06		26,44	+ 0,38		11,39		71.10.	52,58		10,17	+ 17,59
July	1.	2. 5.	6,2	I.	1,72	8.44.	23,01		23,51	+ 0,50		13,85		73.12.	25,44		43,10	+ 17,66
	10.	1.22.	4,2	I.	1,92	8.36.	42,94		43,53	+ 0,59	N.	16,30	27,85	74.48.	24,01		36,56	+ 12,55
	11.	1.16.	30,9	I.	1,95	8.35.	5,33		6,05	+ 0,72								
	15.	0.52.	58,6								N.	17,37	29,20	75.25.	40,43		53,60	+ 13,17
	18.	0.34.	10,6	I.	2,04	8.20.	14,00		14,76	+ 0,76	N.	17,82	29,82	75.41.	47,94		0,02	+ 12,08
	20.	0.21.	16,3	I.	2,06	8.15.	10,66		11,45	+ 0,79	N.	18,03	30,03	75.49.	51,36		64,14	+ 12,78
	22.	0. 8.	12,1	I.	2,07	8. 9.	57,42		58,12	+ 0,70								
	24.	23.48.	32,8	II.	2,07	8. 2.	4,55		5,57	+ 1,02								
	28.	23.22.	56,0								N.	17,91	29,72	76. 1.	23,14		28,91	+ 5,77
	30.	23.10.	33,4	II.	2,02	7.47.	43,24		43,86	+ 0,62	N.	17,64	29,30	75.59.	6,60		10,23	+ 3,63
Aug.	1.	22.58.	48,7	II.	1,99	7.43.	44,73		45,49	+ 0,86	N.	17,33	28,89	75.55.	23,02		26,74	+ 3,72
	2.	22.53.	6,3	II.	1,97	7.41.	57,93		58,56	+ 0,63	N.	17,16	28,58	75.53.	7,51		6,64	- 0,87
	4.	22.42.	7,3	II.	1,92	7.38.	50,31		50,99	+ 0,68	N.	16,76	28,06	75.47.	35,21		37,45	+ 2,24
	6.	22.31.	45,9								N.	16,33	27,44	75.41.	13,51		12,56	- 0,95
	18.	21.43.	14,5	II.	1,59	7.34.	59,55		60,05	+ 0,50		13,51		74.54.	29,67		24,76	- 4,91
	26.	21.22.	35,4	II.	1,42	7.45.	49,49		50,03	+ 0,54		11,81		74.29.	14,56		6,74	- 7,82
	27.	21.20.	33,5	II.	1,40	7.47.	43,80		44,16	+ 0,36		11,62		74.27.	5,76		57,33	- 8,43
	28.	21.18.	37,6	II.	1,38	7.49.	44,20		44,82	+ 0,62		11,44		74.25.	12,38		5,13	- 7,25
	30.	21.15.	5,3								S.	11,08	19,34	74.22.	23,42		15,62	- 7,80
Sept.	1.	21.11.	56,3	II.	1,30	7.58.	47,97		48,25	+ 0,28		10,75		74.20.	53,90		45,61	- 8,29
	2.	21.10.	29,7	II.	1,28	8. 1.	17,68		18,20	+ 0,52		10,60		74.20.	42,40		32,50	- 9,90
	10.	21. 1.	48,5	II.	1,15	8.24.	7,49		7,69	+ 0,20		9,50		74.33.	9,05		58,15	- 10,90
	16.	20.57.	56,2	II.	1,05	8.43.	53,81		54,21	+ 0,40								
	19.	20.56.	39,2	II.	1,02	8.54.	26,35		26,68	+ 0,33		8,60		75.20.	43,74		33,68	- 10,06

Greenwich Mean Solar Time of Transit of Centre.				Limb Observed.	Reduction to Transit of Centre.	R.A. of Centre from Observation.			Seconds of Tabular R.A.	Excess of Tabular R.A.	Limb Observed.	Parallax.	Assumed Semi- diameter.	Geocentric N.P.D. of Centre from Observation.			Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d.	h.	m.	s.		s.	h.	m.	s.	s.	s.		"	"	°	'	"	"	"
Sept.	20.	20.	56.18,5	II.	1,00	8.	58.	2,11	2,45	+ 0,34		8,52		75.	28.	21,00	11,77	- 9,23
	23.	20.	55.29,6	II.	0,97	9.	9.	2,71	3,09	+ 0,38		8,29		75.	54.	7,75	59,25	- 8,50
	25.	20.	55.6,9	II.	0,95	9.	16.	33,03	33,56	+ 0,53		8,16		76.	13.	44,04	35,33	- 8,71
	26.	20.	54.58,6	II.	0,94	9.	20.	21,28	21,52	+ 0,24		8,10		76.	24.	16,17	6,82	- 9,35
	27.	20.	54.51,7	II.	0,93	9.	24.	10,95	11,20	+ 0,25		8,04		76.	35.	16,14	7,12	- 9,02
	30.	20.	54.40,5	II.	0,90	9.	35.	49,33	49,58	+ 0,25		7,87		77.	11.	9,68	59,59	- 10,09
Oct.	6.	20.	54.53,0	II.	0,83	9.	59.	41,24	41,52	+ 0,28		7,61		78.	35.	27,78	17,45	- 10,33
	10.	20.	55.21,5	II.	0,79	10.	15.	55,99	56,29	+ 0,30		7,46		79.	40.	28,49	19,82	- 8,67
	14.	20.	56.1,9								N.	7,35	11,46	80.	52.	4,44	56,79	- 7,65
	16.	20.	56.25,8	II.	0,76	10.	40.	39,75	40,10	+ 0,35		7,29		81.	30.	11,21	3,88	- 7,33
	22.	20.	57.49,6	II.	0,71	11.	5.	43,14	43,52	+ 0,38		7,17		83.	32.	59,79	53,85	- 5,94
	27.	20.	59.12,0	II.	0,69	11.	26.	48,57	48,76	+ 0,19		7,09		85.	23.	59,55	54,03	- 5,52
	28.	20.	59.29,8	II.	0,68	11.	31.	2,98	3,08	+ 0,10		7,07		85.	47.	2,60	55,52	- 7,08
Nov.	6.	21.	2.28,5	II.	0,64	12.	9.	31,09	31,27	+ 0,18		6,96		89.	24.	13,47	8,49	- 4,98
	10.	21.	3.59,8	II.	0,63	12.	26.	48,86	48,83	- 0,03		6,92		91.	5.	5,98	1,58	- 4,40
	15.	21.	6.5,0	II.	0,61	12.	48.	37,23	37,35	+ 0,12		6,86		93.	13.	18,97	16,58	- 2,39
	20.	21.	8.25,6	II.	0,69	13.	10.	40,97	40,91	- 0,06		6,81		95.	22.	30,86	29,28	- 1,58
	25.	21.	11.4,1	II.	0,57	13.	33.	2,66	2,53	- 0,13		6,75		97.	31.	9,05	7,58	- 1,47
	26.	21.	11.38,2	II.	0,57	13.	37.	33,47	33,32	- 0,15		6,74		97.	56.	41,49	38,68	- 2,81
Dec.	4.	21.	16.44,9	II.	0,56	14.	14.	13,38	13,11	- 0,27		6,64		101.	16.	8,04	5,20	- 2,84
	5.	21.	17.27,4	II.	0,56	14.	18.	52,57	52,59	+ 0,02		6,68		102.	40.	20,38	13,61	- 6,77
	19.	21.	29.23,6									6,41		106.	48.	47,39	47,68	+ 0,29
	20.	21.	30.23,5									6,40		107.	8.	12,24	12,39	+ 0,15

The observations of the defective Limb are not taken account of from July 10 to August 6, the cusps being considered too sharp for satisfactory bisection during this interval. For the assumed values of the Semidiameter see the Introduction.

RIGHT ASCENSIONS AND NORTH POLAR DISTANCES OF PALLAS.

Greenwich Mean Solar Time of Transit of Centre.				R.A. of Centre from Observation.			Seconds of Tabular R.A.	Excess of Tabular R.A.	Parallax.	Geocentric N.P.D. of Centre from Observation.			Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d.	h.	m.	s.	h.	m.	s.	s.	s.	"	°	'	"	"	"
April	24.	13.	59.0,5	16.	12.	8,79	28,52	+ 19,73	2,05	67.	37.	48,45	79,60	+ 31,15
	25.	13.	54.26,5	16.	11.	30,58	50,40	+ 19,82	2,04	67.	25.	21,99	70,80	(+ 48,81)
	27.	13.	45.15,2	16.	10.	10,87	31,00	+ 20,13	2,01	67.	2.	8,20	39,69	+ 31,49
	29.	13.	36.0,3	16.	8.	47,54	67,66	+ 20,12	1,99	66.	39.	43,79	73,38	+ 29,59
	30.	13.	31.21,4	16.	8.	4,39	24,61	+ 20,22	1,98	66.	28.	54,88	85,58	+ 30,70
May	1.	13.	26.41,6	16.	7.	20,43	40,70	+ 20,27	1,96	66.	18.	25,38	55,07	+ 29,69
	2.	13.	22.1,0						1,95	66.	8.	12,63	42,36	+ 29,73
	13.	12.	29.54,5	15.	57.	42,66	63,27	+ 20,61	1,83	64.	37.	5,12	29,01	+ 23,89
	16.	12.	15.34,4	15.	55.	9,89	30,36	+ 20,47	1,80	64.	19.	22,75	46,69	+ 23,94
	17.	12.	10.47,4	15.	54.	18,64	39,21	+ 20,57						
	18.	12.	6.0,5	15.	53.	27,55	48,07	+ 20,52	1,79	64.	9.	26,26	45,38	+ 19,12
	27.	11.	23.7,7	15.	45.	56,70	76,98	+ 20,28						
	31.	11.	4.15,6	15.	42.	47,71	67,83	+ 20,12						
June	7.	10.	31.41,8						1,67	60.	46.	9,18	17,56	+ 8,38
	13.	10.	4.23,2						1,65	64.	4.	16,99		
	14.	9.	59.54,0						1,64	64.	8.	13,78		
	15.	9.	55.26,0						1,64	64.	12.	28,66		

April 24. The N.P.D. has been corrected by +13",34, the observation being supposed to be taken on the micrometer wire as left in the observation of 42 Leonis Minoris.

April 25. Perhaps the Planet was bisected unintentionally by the micrometer wire, the reading of which at the time is uncertain, having probably been altered after the observation of Regulus.

RIGHT ASCENSIONS AND NORTH POLAR DISTANCES OF CERES.

Greenwich Mean Solar Time of Transit of Centre.	R.A. of Centre from Observation.	Seconds of Tabular R.A.	Excess of Tabular R.A.	Parallax.	Geocentric N.P.D. of Centre from Observation.	Seconds of Tabular N.P.D.	Excess of Tabular N.P.D.
d. h. m. s.	h. m. s.	s.	s.	"	° ' "	"	"
April 24. 14. 4. 17,5				4,31	104. 4. 10,06	12,80	+ 2,74
25. 13. 59. 43,8	16. 16. 48,71	52,69	+ 3,98	4,32	104. 4. 17,52	19,91	+ 2,39
27. 13. 50. 32,2	16. 15. 28,78	32,83	+ 4,05	4,35	104. 4. 31,16	35,50	+ 4,34
29. 13. 41. 15,9	16. 14. 3,98	8,05	+ 4,07	4,37	104. 4. 51,87	53,30	+ 1,43
30. 13. 36. 36,0	16. 13. 19,86	23,90	+ 4,04	4,38	104. 4. 59,46	63,30	+ 3,84
May 1. 13. 31. 55,0	16. 12. 34,69	38,63	+ 3,94	4,39	104. 5. 9,37	14,00	+ 4,63
2. 13. 27. 12,6	16. 11. 48,08	52,29	+ 4,21	4,41	104. 5. 22,40	25,50	+ 3,10
6. 13. 8. 14,1	16. 8. 32,71	37,04	+ 4,33	4,44	104. 6. 18,03	21,91	+ 3,88
13. 12. 34. 31,7	16. 2. 20,60	24,91	+ 4,31	4,49	104. 8. 47,39	51,19	+ 3,80
16. 12. 19. 57,0	15. 59. 33,21	37,46	+ 4,25	4,49	104. 10. 18,50	21,39	+ 2,89
17. 12. 15. 4,9	15. 58. 36,88	41,03	+ 4,15				
27. 11. 26. 22,1	15. 49. 11,61	16,79	+ 5,18	4,47	104. 18. 52,79	55,78	+ 2,99
31. 11. 7. 2,8	15. 45. 35,40	39,64	+ 4,24	4,44	104. 23. 25,15	29,08	+ 3,93
June 7. 10. 33. 39,0				4,37	104. 33. 32,35	37,37	+ 5,02
10. 10. 19. 33,8				4,33	104. 38. 47,09	53,27	+ 6,18
13. 10. 5. 38,4				4,29	104. 44. 38,06	44,07	+ 6,01
14. 10. 1. 2,3	15. 34. 35,81	39,87	+ 4,06	4,27	104. 46. 43,89	49,07	+ 5,18
15. 9. 56. 27,5	15. 33. 56,84	60,79	+ 3,95	4,26	104. 48. 53,35	58,06	+ 4,71
22. 9. 25. 0,7	15. 30. 0,72						

May 27. Most probably an error of 1^s in the observation.

RIGHT ASCENSIONS AND NORTH POLAR DISTANCES OF DE VICO'S COMET.

Greenwich Mean Solar Time of Transit of Centre.	R.A. of Centre from Observation.	Parallax.	Geocentric N.P.D. of Centre from Observation.
d. h. m. s.	h. m. s.	"	° ' "
Sept. 30. 12. 29. 44,1		30,16	95. 56. 22,69
Oct. 2. 12. 24. 3,8	1. 11. 41,91	29,05	95. 6. 41,09
3. 12. 21. 8,6	1. 12. 42,79	28,49	94. 42. 19,17
5. 12. 15. 8,8	1. 14. 35,05	27,40	93. 54. 46,98
7. 12. 8. 58,8	1. 16. 17,19	26,32	93. 9. 14,97
10. 11. 59. 26,5	1. 18. 32,93		

DETERMINATION OF THE POSITION OF THE ECLIPTIC, AND OF THE MEAN ERROR OF
THE ASSUMED RIGHT ASCENSIONS OF THE FUNDAMENTAL STARS, FROM THE
TRANSIT AND CIRCLE OBSERVATIONS OF THE SUN IN THE YEAR 1844.

The total number of Circle Observations of the Sun, exclusive of those of single limbs, was 124. These have been divided into four groups of 31 observations, and each of these has been subdivided into three groups containing ten, eleven, and ten observations. The table below exhibits for each of the twelve groups, the means of the days of observation, and the mean values (α) of the Tabular Errors in North Polar Distance, derived from the columns in pages 128—130, together with the Sun's Longitude (λ) and North Polar Distance (Δ) at the mean noons of the several mean days.

Limiting Days of Observation of each group.	Mean Day.	Mean of the Tabular Errors in N.P.D.	Number of Observations.	Sun's Longitude at mean Noon of mean Day.	Sun's N.P.D. at mean Noon of mean Day.
		"		° ' "	° ' "
Jan. 6.....Feb. 1	Jan. 20	+ 0,99	10	299.36. 4	110.15. 5
Feb. 3.....Feb. 23	Feb. 12	+ 2,07	11	322.55.58	103.53. 2
Feb. 27.....Mar. 28	Mar. 10	+ 0,89	10	350. 3.12	93.56.35
Mar. 29.....Apr. 12	Apr. 5	+ 0,75	10	15.48.10	83.46.35
Apr. 15.....May 3	Apr. 25	- 0,07	11	35.21.16	76.40.57
May 7.....June 5	May 21	- 0,15	10	60.28.25	69.44. 0
June 8.....June 28	June 19	- 0,58	10	88.13.14	66.33.12
June 29.....Aug. 19	July 24	- 0,72	11	121.36.10	70.10.51
Aug. 24.....Sept. 5	Aug. 31	+ 0,48	10	158. 7.18	81.28. 8
Sept. 11.....Sept. 28	Sept. 21	+ 0,79	10	178.34.25	89.25.55
Sept. 30.....Nov. 7	Oct. 15	- 0,35	11	202.14.23	98.39.56
Nov. 8.....Dec. 28	Dec. 1	- 1,17	10	249.27.48	111.53.15

Formula of Calculation.

$$\alpha + m \cos \lambda \operatorname{cosec} \Delta + n \sin \lambda \operatorname{cosec} \Delta + p = 0.$$

The following equations were deduced from this formula by means of the data in the Table above. Each equation is multiplied by the respective number of observations.

First Quarter	{	Jan. 20..... + 9,90 + $m \times 5,2651 - n \times 9,2678 + 10p = 0.$
		Feb. 12..... + 22,77 + $m \times 9,0414 - n \times 6,8298 + 11p = 0.$
		Mar. 10..... + 8,90 + $m \times 9,8731 - n \times 1,7314 + 10p = 0.$
Second Quarter	{	Apr. 5..... + 7,50 + $m \times 9,6791 + n \times 2,7394 + 10p = 0.$
		Apr. 25..... - 0,77 + $m \times 9,2194 + n \times 6,5409 + 11p = 0.$
		May 21..... - 1,50 + $m \times 5,2535 + n \times 9,2755 + 10p = 0.$
Third Quarter	{	June 19..... - 5,80 + $m \times 0,3385 + n \times 10,8947 + 10p = 0.$
		July 24..... - 7,92 - $m \times 6,1272 + n \times 9,9586 + 11p = 0.$
		Aug. 31..... + 4,80 - $m \times 9,3836 + n \times 3,7681 + 10p = 0.$
Fourth Quarter	{	Sept. 21..... + 7,00 - $m \times 9,9974 + n \times 0,2489 + 10p = 0.$
		Oct. 15..... - 3,85 - $m \times 10,2993 - n \times 4,2114 + 11p = 0.$
		Dec. 1..... - 11,70 - $m \times 3,7806 - n \times 10,0919 + 10p = 0.$

From the above, new equations are formed by adding and subtracting as indicated below :

$$\begin{aligned} &\text{First Quarter} + \text{Second} + \text{Third} + \text{Fourth} \\ &+ 29'',33 + m \times 9,0820 + n \times 11,2938 + 124p = 0. \\ &\text{First Quarter} + \text{Second} - \text{Third} - \text{Fourth} \\ &+ 64'',27 + m \times 87,5812 - n \times 9,8402 = 0, \\ &\text{First Quarter} - \text{Second} - \text{Third} + \text{Fourth} \\ &+ 36'',71 - m \times 8,8774 - n \times 75,0606 = 0. \end{aligned}$$

The solution of these equations gives,

$$m = -0''.670, \quad n = +0''.568, \quad p = -0''.240.$$

Let $\delta\lambda$ = the mean excess for the year of the Tabular Longitude of the Sun above the true Longitude.

δR = the mean excess for the year of the Tabular R.A. of the Sun above the true R.A.

$\delta\Delta$ = the mean excess for the year of the Tabular N.P.D. of the Sun above the true N.P.D.

δI = the mean excess of the Obliquity (I) assumed in the Tables above the true Obliquity.

A = the mean of 116 Tabular Errors in R.A. given in pages 128—130, observations of single limbs being excluded.

D = the mean of the 124 Tabular Errors in N.P.D. in pages 128—130, exclusive of observations of single limbs.

q = the mean excess of the assumed R.A. of the fundamental stars, above the true R.A.

p = the mean excess within the Tropics, of the N.P.D. determined by the Circle observations and calculations contained in this Volume, above the true N.P.D.

Then, $\delta\lambda = m \operatorname{cosec} I = -0''.670 \times \operatorname{cosec} 23^\circ.27',6 = -1''.683.$

$$\delta R = \frac{\delta\lambda}{15} \times \frac{\sum \cos I \operatorname{cosec}^2 \Delta}{2\pi} = \frac{\delta\lambda}{15} = -0^s.112.$$

$$\begin{aligned} \delta\Delta &= (\text{Tabular N.P.D.} - \text{Observed N.P.D.}) + (\text{Observed N.P.D.} - \text{true N.P.D.}) \\ &= D + p = +0''.236 - 0''.240 = -0''.006. \end{aligned}$$

$$\delta I = n \sec I = +0''.568 \times \sec 23^\circ.27',6 = +0''.619.$$

$$\begin{aligned} q &= (\text{Tabular R.A.} - \text{True R.A.}) - (\text{Tabular R.A.} - \text{Observed R.A.}) \\ &= \delta R - A = -0^s.112 + 0^s.102 = -0^s.010. \end{aligned}$$

Hence the assumed R.A. of the fundamental stars are too small by $0^s.010$.

OCCULTATIONS
OF
FIXED STARS BY THE MOON,
WITH
THE EQUATIONS GIVEN BY THE CALCULATION
OF THE OCCULTATIONS.

1844.

COMPARISONS OF CLOCKS AND CHRONOMETERS USED IN THE CALCULATION
OF THE FOLLOWING OCCULTATIONS.

* * THE letter *H* is an abbreviation for Hardy, the Transit Clock; *G* for Graham, the Clock in the Dome, commonly used with the Five-feet Equatoreal. *U* and *X* are Sidereal Chronometers, each beating half-seconds.

Day of Comparison.	Clock.	Clock Time.	Chron.	Chronometer Time.	Day of Comparison.	Clock.	Clock Time.	Chron.	Chronometer Time.
1844.		<i>h.</i> <i>m.</i> <i>s.</i>		<i>h.</i> <i>m.</i> <i>s.</i>	1844.		<i>h.</i> <i>m.</i> <i>s.</i>		<i>h.</i> <i>m.</i> <i>s.</i>
Jan. 2	H.	5.59.40	X.	6. 0. 0,9	Apr. 1	G.	8.26.13	U.	8.28.10,5
	H.	7.18.50	X.	7.19.10,5		H.	8.29.46	U.	8.34. 4,8
Feb. 6	G.	9.50.36	U.	9.52.42,0	Aug. 1	G.	22.50.24	U.	22.46.10,4
	H.	9.52.15	U.	9.54.42,0		H.	22.57.20	U.	22.58. 5,5
	H.	9.52.41	U.	9.55. 7,9	Sept. 29	H.	21.21.27	X.	21.22.51,4
Mar. 28	H.	7.53.27	X.	7.54. 2,4		G.	22. 1. 6	U.	22. 0.17,3
	G.	7.58.25	X.	7.57.53,9		H.	22. 3.59	U.	22. 3.48,0
	G.	7.59.46	X.	7.59.15,1		H.	22. 6.46	X.	22. 8.10,5
	G.	8.55.22	X.	8.54.50,5	Oct. 3	G.	1.34.52	U.	1.32.31,5
	H.	9. 2. 7	X.	9. 2.42,5		H.	1.35.40	U.	1.35.28,8
Mar. 29	H.	11.14.22	X.	11.15. 1,8		G.	3.10.37	U.	3. 8.15,0
	H.	11.14.48	X.	11.15.27,9		H.	3.13.14	U.	3.13. 2,7
	G.	11.17.12	X.	11.16.24,5	Nov. 25	G.	3.47.31	U.	3.23.12,5
	G.	11.56. 4	X.	11.55.15,9		H.	3.18. 1	U.	3.17.45,5
	H.	11.56.43	X.	11.57.23,0		H.	3.19.48	U.	3.19.32,4
	H.	12. 4.17	U.	12. 8.15,1	Dec. 20	H.	22. 4.38	X.	22. 4.15,0
Apr. 1	G.	7.28.52	U.	7.30.50,3		H.	23.23.24	X.	23.23. 1,1
	H.	7.31.58	U.	7.36.16,6		G.	23.42.48	U.	23. 8.12,3
	H.	8.21.31	X.	8.22.17,7		H.	23.12.17	U.	23.15.15,4

Day of Observation 1844.	Ref. No.	Star.	Phænomenon.	Moon's Limb.	Clock or Chronom.	Instrument.	Time by Clock or Chronom.	Sidereal Time.	Greenwich Mean Solar Time.	Observer.
							<i>h. m. s.</i>	<i>h. m. s.</i>	<i>h. m. s.</i>	
Jan. 2	1	τ Tauri	Disappearance	Dark	X.	5-feet Equatoreal	5.55.12,8	5.55.28,45	11. 8.18,86	C.
...	2	τ Tauri	Reappearance	Bright	X.	5-feet Equatoreal	7.12.49,5	7.13. 5,54	12.25.43,24	C.
Feb. 6	3	ϵ Leonis	Reappearance	Dark	G.	5-feet Equatoreal	9.44. 9,2	9.44.30,69	12.39. 6,70	G.
Mar. 28	4	r Cancri	Disappearance	Dark	G.	5-feet Equatoreal	7.46.25,2	7.46.11,86	7.20.35,98	B.
...	5	r Cancri	Reappearance	Bright	H.	46-inch Dollond	7.44.52	7.45.45,06	7.20. 9,26	G.
...	6	α^2 Cancri	Disappearance	Dark	G.	5-feet Equatoreal	8.51.59	8.51.45,12	8.25.58,50	B.
29	7	α^2 Cancri	Reappearance	Bright	H.	46-inch Dollond	8.49.38	8.50.31,11	8.24.44,70	G.
...	8	ϵ Leonis	Disappearance	Dark	G.	5-feet Equatoreal	11.12.38,0	11.12. 4,99	10.41.59,47	G.
April 1	9	ϵ Leonis	Reappearance	Bright	G.	5-feet Equatoreal	11.54.17,6	11.53.43,87	11.23.31,53	G.
...	10	q Virginis	Disappearance	Dark	G.	5-feet Equatoreal	7.23.18,1	7.21.55,32	6.40.39,79	B.
Aug. 1	11	q Virginis	Reappearance	Bright	X.	Northumb. Equat.	8.17.54,8	8.18. 5,66	7.36.40,93	G.
Sept. 29	12	16 Piscium	Disappearance	Dark	G.	5-feet Equatoreal	8.19.50,9	8.18.27,17	7.37. 2,38	B.
...	13	ρ^3 Arietis	Reappearance	Bright	H.	46-inch Dollond	11.40.27,1	11.41.25,96	10.55.32,00	G.
...	14	ρ^3 Arietis	Disappearance	Dark	H.	46-inch Dollond	12.44.15	12.45.13,90	11.59. 9,50	G.
Oct. 3	15	16 Geminorum	Reappearance	Bright	G.	5-feet Equatoreal	22.47.18,0	22.43.15,20	13.59.47,71	B.
...	16	ν Geminorum	Disappearance	Dark	X.	Northumb. Equat.	20.59.51	20.59.17,32	8.24. 8,30	C.
...	17	16 Geminorum	Reappearance	Bright	X.	Northumb. Equat.	22. 0. 5,5	21.59.31,75	9.24.12,87	C.
...	18	H. C. 12358.	Disappearance	Dark	G.	5-feet Equatoreal	21.59.17,1	21.59.30,12	9.24.11,24	G.
...	19	ν Geminorum.	Reappearance	Bright	U.	46-inch Dollond	21.58.35,3	21.59.37,02	9.24.18,12	B.
Nov. 25	20	ι Tauri	Disappearance	Dark	G.	5-feet Equatoreal	1.31.55	1.30.39,81	12.39. 2,72	G.
Dec. 20	21	ρ^3 Arietis	Reappearance	Bright	G.	5-feet Equatoreal	2. 5.19,2	2. 4. 3,60	13.12.21,03	G.
...	22	ρ^3 Arietis	Disappearance	Dark	U.	46-inch Dollond	2. 2.50,2	2. 3.55,56	13.12.13,02	B.
...	23	ρ^3 Arietis	Reappearance	Bright	G.	5-feet Equatoreal	2.29. 9,1	2.27.53,17	13.36. 6,71	G.
...	24	ρ^3 Arietis	Disappearance	Dark	U.	46-inch Dollond	2.26.50,1	2.27.55,49	13.36. 9,02	B.
...	25	ρ^3 Arietis	Reappearance	Bright	G.	5-feet Equatoreal	3. 6. 8,0	3. 4.51,56	14.12.59,03	G.
...	26	ρ^3 Arietis	Disappearance	Dark	G.	5-feet Equatoreal	3. 6.28,2	3. 5.11,76	14.13.19,18	G.
...	27	ρ^3 Arietis	Reappearance	Bright	U.	46-inch Dollond	3. 4. 6,1	3. 5.11,56	14.13.18,98	B.
...	28	ρ^3 Arietis	Disappearance	Dark	G.	5-feet Equatoreal	3.36.21,7	3.12.56,48	10.52.39,48	B.
...	29	ρ^3 Arietis	Reappearance	Bright	X.	Northumb. Equat.	21.56.33,0	21.57.42,50	3.59.59,37	C.
...	30	ρ^3 Arietis	Disappearance	Dark	X.	Northumb. Equat.	23. 0.17,0	23. 1.26,42	5. 3.32,85	C.
...	31	ρ^3 Arietis	Reappearance	Bright	G.	5-feet Equatoreal	23.39.14,9	23. 2.27,32	5. 4.33,58	B.

No. 1. Very exact.

No. 2. Good.

No. 3. A cloud clearing off at the time noted, the observer was doubtful whether the instant of emergence was observed. As it was found by calculation that the noted time must have been too late, the reduction of this observation is not added.

No. 4. G's observation 'very doubtful,' the star being barely visible on account of haze.

No. 5. 'Not certain to a second.' (B). 'Seen early but not at the moment of emergence.' (G). The calculation of this observation is not added, the time noted by G being found to be too late, and that by B being evidently affected by some error.

No. 6. Not quite exact, the disappearance occurring earlier than the observer expected.

No. 7. Considered very accurate.

No. 9. 'Very accurate, not half a second in error.' (G). 'Not very good.' (B).

No. 10. Very exact.

No. 11. 'Not satisfactory, as the star was not seen immediately.' As the noted time appears to have been considerably too late, the calculation of this observation is not added.

No. 13. The brightness of the Moon made it extremely difficult to see the star. The observation is not certain to 2^s.

No. 14. 'Very good.' (G). 'Not seen early.' (B). I was looking at a wrong part of the field and suspected that the star had emerged before I saw it.

No. 15. 'The star was very faint at the Limb, and the time is doubtful to a second.' (G).

No. 16. G's observation was considered very accurate.

No. 17. 'Very exact.' (G). B's observation was somewhat doubtful.

No. 18. This observation was thought to be good. The star is not in the Nautical Almanac, and the place of it assumed in the Calculations is taken from the British Association Catalogue of Lalande.

No. 19. G thought his observation was injured by that immediately preceding. B's was 'good.'

No. 20. 'Good.'

No. 21. Very exact.

No. 22. At the time noted by C the star was at a distance from the Limb which, by a micrometer measurement made by estimation immediately after the observation, was ascertained to be 0^s.339, or 5^s.75, one micrometer revolution being equal to 16^s.970. C's counting was found to be 10^s in advance, and the observation has been altered accordingly. B's observation was doubtful. It is evidently affected by some error.

Disappearance of τ Tauri, Jan. 2, 11^h. 8^m. 18^s. 86 + t^s + τ^s Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$88^{\circ}.52'.6''.75 + 15''.0411 \times t$
Moon's Geocentric Right Ascension in arc	$68.10.53,55 + 0,5525 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$66.50.59,66 - 0,0300 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$54.50,53 \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$14.56,66 \times (1 + 0,001 n)$
Star's Right Ascension in arc	$68.13.56,70 + e''$
Star's N.P.D.	$67.20.47,90 + f.$
Moon's apparent Right Ascension in arc	$67^{\circ}.57'.49''.55 + 0,4066t + 0,5580\tau + 1,0101x + 0,0016y - 0,7919m$
Moon's apparent N.P.D.	$67.18.39,27 - 0,0502t - 0,0297\tau + 0,0014x + 1,0135y + 1,6825m$
Moon's apparent Semidiameter	$15.8,77 - 0,0002t + 0,9088n.$

Apparent Distance of Star from Moon's centre:

$$15'.1'',64 + 0'',9133 \times \{e - 0,4066t - 0,5580\tau - 1,0101x - 0,0016y + 0,7919m\} \\ - 0'',1418 \times \{-0,0502t - 0,0297\tau + 0,0014x + 1,0135y + 1,6825m\} \\ + 0'',1436 \times f.$$

Final Equation:

$$+ 7'',13 = +0,9133e + 0,1436f - 0,9227x - 0,1452y - 0,3640t - 0,5054\tau + 0,4846m - 0,9088n.$$

Reappearance of τ Tauri, Jan. 2, 12^h. 25^m. 43^s. 24 + t^s + τ^s Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$108^{\circ}.16'.23''.10 + 15''.0411 \times t$
Moon's Geocentric Right Ascension in arc	$68.53.41,55 + 0,5534 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$66.48.45,94 - 0,0276 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$54.51,83 \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$14.57,02 \times (1 + 0,001 n)$
Star's Right Ascension in arc	$68.13.56,70 + e''$
Star's N.P.D.	$67.20.47,90 + f.$
Moon's apparent Right Ascension in arc	$68^{\circ}.30'.15''.06 + 0,4338t + 0,5579\tau + 1,0083x + 0,0029y - 1,4181m$
Moon's apparent N.P.D.	$67.18.34,03 + 0,0075t - 0,0293\tau - 0,0025x + 1,0120y + 1,8113m$
Moon's apparent Semidiameter	$15.7,78 - 0,0004t + 0,9078n.$

Apparent Distance of Star from Moon's centre:

$$15'.12'',63 + 0'',9126 \times \{-e + 0,4338t + 0,5579\tau + 1,0083x + 0,0029y - 1,4181m\} \\ - 0'',1458 \times \{+0,0075t - 0,0293\tau - 0,0025x + 1,0120y + 1,8113m\} \\ + 0'',1476 \times f.$$

Final Equation:

$$- 4'',85 = -0,9126e + 0,1476f + 0,9205x - 0,1449y + 0,3952t + 0,5134\tau - 1,5582m - 0,9078n.$$

Disappearance of γ Cancri, March 28, $7^h.20^m.35^s.98 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$116^\circ.32'.57''.90 + 15''.0411 \times t$
Moon's Geocentric Right Ascension in arc	$117^\circ.59'.57''.00 + 0,5423 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$72^\circ.22'.4,07 + 0,1353 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$56'.25,76 \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$15'.22,60 \times (1 + 0,001 n)$
Star's Right Ascension in arc	$118^\circ.9'.34,35 + e''$
Star's N.P.D.	$73^\circ.7'.15,60 + f.$
Moon's apparent Right Ascension in arc	$118^\circ.0'.52'',78 + 0,3872 t + 0,5481 \tau + 1,0107 x - 0,0001 y + 0,0564 m$
Moon's apparent N.P.D.	$72^\circ.54'.18,90 + 0,1360 t + 0,1372 \tau + 0,0001 x + 1,0136 y + 1,9613 m$
Moon's apparent Semidiameter	$15'.35,20 + 0,0000 t + 0,9352 n.$

Apparent Distance of Star from Moon's centre:

$$15'.23'',08 + 0'',5169 \times \{e - 0,3872 t - 0,5481 \tau - 1,0107 x + 0,0001 y - 0,0564 m\} \\ - 0'',8413 \times \{+ 0,1360 t + 0,1372 \tau + 0,0001 x + 1,0136 y + 1,9613 m\} \\ + 0'',8417 \times f.$$

Final Equation:

$$+ 12'',12 = + 0,5169 e + 0,8417 f - 0,5225 x - 0,8527 y - 0,3146 t - 0,3987 \tau - 1,6792 m - 0,9352 n.$$

Disappearance of α^2 Cancri, March 29, $10^h.41^m.59^s.47 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$168^\circ.1'.14'',85 + 15''.0411 \times t$
Moon's Geocentric Right Ascension in arc	$132^\circ.47'.52,35 + 0,5400 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$76^\circ.39'.30,51 + 0,1772 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$57'.26,88 \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$15'.39,28 \times (1 + 0,001 n)$
Star's Right Ascension in arc	$132^\circ.29'.52,20 + e''$
Star's N.P.D.	$77^\circ.32'.42,60 + f.$
Moon's apparent Right Ascension in arc	$132^\circ.26'.47'',03 + 0,4148 t + 0,5449 \tau + 1,0086 x + 0,0015 y - 1,2763 m$
Moon's apparent N.P.D.	$77^\circ.17'.15,88 + 0,1984 t + 0,1785 \tau - 0,0013 x + 1,0112 y + 2,2916 m$
Moon's apparent Semidiameter	$15'.49,83 - 0,0004 t + 0,9498 n.$

Apparent Distance of Star from Moon's centre:

$$15'.44'',18 + 0'',1868 \times \{e - 0,4148 t - 0,5449 \tau - 1,0086 x - 0,0015 y + 1,2763 m\} \\ - 0'',9813 \times \{+ 0,1984 t + 0,1785 \tau - 0,0013 x + 1,0112 y + 2,2916 m\} \\ + 0'',9813 \times f.$$

Final Equation:

$$+ 5'',65 = + 0,1868 e + 0,9813 f - 0,1871 x - 0,9926 y - 0,2718 t - 0,2769 \tau - 2,0103 m - 0,9498 n.$$

Reappearance of α^s Cancr, March 29, $11^h.23^m.31^s.53 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$178.25.58,05 + 15,0411 \times t$
Moon's Geocentric Right Ascension in arc	$133.10.18,15 + 0,5400 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$76.46.53,28 + 0,1781 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$57.28,49 \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$15.39,72 \times (1 + 0,001 n)$
Star's Right Ascension in arc	$132.29.52,20 + e''$
Star's N.P.D.	$77.32.42,60 + f.$

Moon's apparent Right Ascension in arc	$132.44.21,76 + 0,4327 t + 0,5443 \tau + 1,0074 x + 0,0018 y - 1,5680 m$
Moon's apparent N.P.D.	$77.25.37,77 + 0,2033 t + 0,1790 \tau - 0,0016 x + 1,0100 y + 2,3491 m$
Moon's apparent Semidiameter.....	$15.49,17 - 0,0005 t + 0,9492 n.$

Apparent Distance of Star from Moon's centre:

$$15'.49'',27 + 0'',8732 \times \{ -e + 0,4327 t + 0,5443 \tau + 1,0074 x + 0,0018 y - 1,5680 m \} \\ - 0'',4471 \times \{ + 0,2033 t + 0,1790 \tau - 0,0016 x + 1,0100 y + 2,3491 m \} \\ + 0'',4479 \times f.$$

Final Equation:

$$- 0'',10 = - 0,8732 e + 0,4479 f + 0,8804 x - 0,4500 y + 0,2875 t + 0,3953 \tau - 2,4194 m - 0,9492 n.$$

Disappearance of e Leonis, April 1, $6^h.40^m.39^s.79 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$110.28.49,80 + 15,0411 \times t$
Moon's Geocentric Right Ascension in arc	$169.54.22,05 + 0,5601 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$91.7.54,04 + 0,2345 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$59.55,90 \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$16.19,89 \times (1 + 0,001 n)$
Star's Right Ascension in arc.....	$170.35.54,60 + e''$
Star's N.P.D.	$92.8.54,30 + f.$

Moon's apparent Right Ascension in arc	$170.26.13,58 + 0,4822 t + 0,5632 \tau + 1,0054 x + 0,0002 y + 1,9219 m$
Moon's apparent N.P.D.	$91.55.38,62 + 0,2402 t + 0,2355 \tau - 0,0003 x + 1,0050 y + 2,8787 m$
Moon's apparent Semidiameter.....	$16.24,85 + 0,0007 t + 0,9849 n.$

Apparent Distance of Star from Moon's centre:

$$16'.25'',02 + 0'',5893 \times \{ e - 0,4822 t - 0,5632 \tau - 1,0054 x - 0,0002 y - 1,9219 m \} \\ - 0'',8078 \times \{ + 0,2402 t + 0,2355 \tau - 0,0003 x + 1,0050 y + 2,8787 m \} \\ + 0'',8078 \times f.$$

Final Equation:

$$- 0'',17 = + 0,5893 e + 0,8078 f - 0,5922 x - 0,8120 y - 0,4789 t - 0,5221 \tau - 3,4580 m - 0,9849 n.$$

Reappearance of ϵ Leonis, April 1, $7^h.36^m.40^s.93 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$124.31.24.90 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc	$170.25.45.45 + 0.5607 \times (t + \tau) + x$
Moon's Geocentric N.P.D.	$91.21.2.29 + 0.2346 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$59.57.53 \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter	$16.20.35 \times (1 + 0.001 n)$
Star's Right Ascension in arc	$170.35.54.60 + e$
Star's N.P.D.	$92.8.54.30 + f$
Moon's apparent Right Ascension in arc	$170.52.24.09 + 0.4526t + 0.5649\tau + 1.0075x + 0.0002y + 1.6106m$
Moon's apparent N.P.D.....	$92.9.7.77 + 0.2405t + 0.2361\tau - 0.0003x + 1.0069y + 2.9055m$
Moon's apparent Semidiameter.....	$16.27.26 + 0.0006t + 0.9873n$

Apparent Distance of Star from Moon's centre:

$$16'.28'',89 + 0'',9993 \times \{-e + 0.4526t + 0.5649\tau + 1.0075x + 0.0002y + 1.6106m\} \\ + 0'',0135 \times \{0.2405t + 0.2361\tau - 0.0003x + 1.0069y + 2.9055m\} \\ - 0'',0137 \times f.$$

Final Equation:

$$-1'',63 = -0.9993e - 0.0137f + 1.0068x + 0.0138y + 0.4549t + 0.5677\tau + 1.6487m - 0.9873n.$$

Disappearance of η Virginis, April 2, $10^h.55^m.32^s.00 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$175.21.29.40 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc	$186.2.51.45 + 0.5843 \times (t + \tau) + x$
Moon's Geocentric N.P.D.	$97.42.30.07 + 0.2274 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax.....	$1.0.36.76 \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter.....	$16.31.00 \times (1 + 0.001 n)$
Star's Right Ascension in arc.....	$186.26.43.80 + e$
Star's N.P.D.	$98.35.41.40 + f$
Moon's apparent Right Ascension in arc	$186.9.53.92 + 0.4274t + 0.5907\tau + 1.0109x + 0.0003y + 0.4271m$
Moon's apparent N.P.D.....	$98.35.6.36 + 0.2338t + 0.2292\tau - 0.0003x + 1.0085y + 3.1833m$
Moon's apparent Semidiameter.....	$16.39.56 + 0.0001t + 0.9996n$

Apparent Distance of Star from Moon's centre:

$$16'.39'',17 + 0'',9883 \times \{e - 0.4274t - 0.5907\tau - 1.0109x - 0.0003y - 0.4271m\} \\ - 0'',0355 \times \{0.2338t + 0.2292\tau - 0.0003x + 1.0085y + 3.1833m\} \\ + 0'',0347 \times f.$$

Final Equation:

$$+0'',39 = +0.9883e + 0.0347f - 0.9991x - 0.0361y - 0.4308t - 0.5919\tau - 0.5351m - 0.9996n.$$

Reappearance of 16 Piscium, Aug. 1, 13^h.59^m.47^s.71 + t^s + τ^s Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	340°.48'.48".00 + 15,0411 $\times t$
Moon's Geocentric Right Ascension in arc	352°.14'.40".35 + 0,4975 $\times (t + \tau)$ + x''
Moon's Geocentric N.P.D.	87°.55'.3".61 - 0,2039 $\times (t + \tau)$ + y
Moon's Horizontal Equatoreal Parallax	56'.27,78 $\times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	15°.23,18 $\times (1 + 0,001 n)$
Star's Right Ascension in arc	352°.7'.25".35 + e''
Star's N.P.D.	88°.45'.15,90 + f .
Moon's apparent Right Ascension in arc	352°.21'.36".98 + 0,3521 t + 0,5025 τ + 1,0100 x - 0,0001 y + 0,4208 m
Moon's apparent N.P.D.	88°.38'.39,63 - 0,2067 t - 0,2060 τ + 0,0001 x + 1,0103 y + 2,6431 m
Moon's apparent Semidiameter	15°.32,76 + 0,0001 t + 0,9328 n .

Apparent Distance of Star from Moon's centre:

$$15'.39'',11 + 0'',9066 \times \{-e + 0,3521t + 0,5025\tau + 1,0100x - 0,0001y + 0,4208m\} \\ - 0'',4220 \times \{-0,2067t - 0,2060\tau + 0,0001x + 1,0103y + 2,6431m\} \\ + 0'',4220 \times f.$$

Final Equation:

$$-6'',35 = -0,9066e + 0,4220f + 0,9156x - 0,4264y + 0,4063t + 0,5425\tau - 0,7339m - 0,9328n.$$

Disappearance of ρ^3 Arietis, Sept. 29, 8^h.24^m.8^s.30 + t^s + τ^s Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	314°.49'.19".80 + 15,0411 $\times t$
Moon's Geocentric Right Ascension in arc	41°.7'.0,15 + 0,5135 $\times (t + \tau)$ + x''
Moon's Geocentric N.P.D.	72°.2'.42,88 - 0,1115 $\times (t + \tau)$ + y
Moon's Horizontal Equatoreal Parallax	54'.25,19 $\times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	14°.49,75 $\times (1 + 0,001 n)$
Star's Right Ascension in arc	41°.55'.41,10 + e''
Star's N.P.D.	72°.35'.48,00 + f .
Moon's apparent Right Ascension in arc	41°.42'.4,42 + 0,5059 t + 0,5142 τ + 1,0006 x - 0,0033 y + 2,1055 m
Moon's apparent N.P.D.	72°.42'.59,99 - 0,1540 t - 0,1105 τ + 0,0029 x + 1,0043 y + 2,4306 m
Moon's apparent Semidiameter	14°.53,61 + 0,0006 t + 0,8936 n .

Apparent Distance of Star from Moon's centre:

$$14'.51'',24 + 0'',8348 \times \{+e - 0,5059t - 0,5142\tau - 1,0006x + 0,0033y - 2,1055m\} \\ + 0'',4852 \times \{-0,1540t - 0,1105\tau + 0,0029x + 1,0043y + 2,4306m\} \\ - 0'',4842 \times f.$$

Final Equation:

$$+2'',37 = +0,8348e - 0,4842f - 0,8338x + 0,4900y - 0,4977t - 0,4829\tau - 0,5783m - 0,8936n.$$

Reappearance of ρ^3 Arietis, Sept. 29, $9^h.24^m.11^s.24 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$329.52.31,80 + 15,0411 \times t$
Moon's Geocentric Right Ascension in arc.....	$41.37.50,85 + 0,5139 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$71.56.8,11 - 0,1090 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$54.24,52 \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter.....	$14.49,56 \times (1 + 0,001 n)$
Star's Right Ascension in arc	$41.55.41,10 + e''$
Star's N.P.D.	$72.35.48,00 + f.$
Moon's apparent Right Ascension in arc	$42.11.19,46 + 0,4691t + 0,5159\tau + 1,0311x - 0,0032y + 2,0149m$
Moon's apparent N.P.D.	$72.33.52,89 - 0,1503t - 0,1083\tau + 0,0028x + 1,0066y + 2,2827m$
Moon's apparent Semidiameter.....	$14.55,52 + 0,0006t + 0,8955n.$

Apparent Distance of Star from Moon's centre:

$$15'.2'',70 + 0'',9465 \times \{-e + 0,4691t + 0,5159\tau + 1,0311x - 0,0032y + 2,0149m\} \\ - 0'',1268 \times \{-0,1503t - 0,1083\tau + 0,0028x + 1,0066y + 2,2827m\} \\ + 0'',1282 \times f.$$

Final Equation:

$$-7'',18 = -0,9465e + 0,1282f + 0,9756x - 0,1307y + 0,4625t + 0,5020\tau + 1,6177m - 0,8955n.$$

Disappearance of 16 Geminorum, Oct. 3, $12^h.39^m.2^s.72 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$22.39.57,15 + 15,0411 \times t$
Moon's Geocentric Right Ascension in arc.....	$93.53.18,90 + 0,5304 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$68.56.43,28 + 0,0530 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$54.25,83 \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter.....	$14.49,94 \times (1 + 0,001 n)$
Star's Right Ascension in arc	$94.40.54,30 + e''$
Star's N.P.D.	$69.24.58,60 + f.$
Moon's apparent Right Ascension in arc	$94.27.19,89 + 0,4826t + 0,5319\tau + 1,0033x - 0,0038y + 2,0478m$
Moon's apparent N.P.D.	$69.33.8,25 + 0,0062t + 0,0551\tau + 0,0033x + 1,0073y + 2,2044m$
Moon's apparent Semidiameter.....	$14.56,48 + 0,0006t + 0,8965n.$

Apparent Distance of Star from Moon's centre:

$$15'.6'',40 + 0'',7880 \times \{+e - 0,4826t - 0,5319\tau - 1,0033x + 0,0038y - 2,0478m\} \\ + 0'',5409 \times \{+0,0062t + 0,0551\tau + 0,0033x + 1,0073y + 2,2044m\} \\ - 0'',5397 \times f.$$

Final Equation:

$$-9'',92 = +0,7880e - 0,5397f - 0,7888x + 0,5478y - 0,3775t - 0,3893\tau - 0,4213m - 0,8965n.$$

Disappearance of ν Geminorum, Oct. 3, $13^h.12^m.21^s.03 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$31.0.54.00 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc	$94.10.58.65 + 0.5303 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$68.58.30.15 + 0.0539 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$54.26.29 \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter	$14.50.07 \times (1 + 0.001 n)$
Star's Right Ascension in arc	$94.56.28.80 + e''$
Star's N.P.D.	$69.41.44.30 + f.$
Moon's apparent Right Ascension in arc	$94.43.4.77 + 0.4628 t + 0.5326 \tau + 1.0046 x - 0.0036 y + 1.9351 m$
Moon's apparent N.P.D.	$69.33.24.47 + 0.0098 t + 0.0560 \tau + 0.0031 x + 1.0085 y + 2.1152 m$
Moon's apparent Semidiameter	$14.57.68 + 0.0005 t + 0.8977 n.$

Apparent Distance of Star from Moon's centre:

$$15'. 4'',40 + 0'',7811 \times \{ + e - 0.4628 t - 0.5326 \tau - 1.0046 x + 0.0036 y - 1.9351 m \} \\ - 0'',5520 \times \{ + 0.0098 t + 0.0560 \tau + 0.0031 x + 1.0085 y + 2.1152 m \} \\ + 0'',5532 \times f.$$

Final Equation:

$$- 6'',72 = + 0.7811 e + 0.5532 f - 0.7864 x - 0.5539 y - 0.3674 t - 0.4469 \tau - 2.6791 m - 0.8977 n.$$

Reappearance of 16 Geminorum, Oct. 3, $13^h.36^m.6^s.71 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$36.58.17.55 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc	$94.23.34.50 + 0.5303 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$68.59.47.55 + 0.0546 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$54.26.63 \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter	$14.50.16 \times (1 + 0.001 n)$
Star's Right Ascension in arc	$94.40.54.30 + e''$
Star's N.P.D.	$69.24.58.60 + f.$
Moon's apparent Right Ascension in arc	$94.53.54.98 + 0.4494 t + 0.5331 \tau + 1.0056 x - 0.0034 y + 1.8307 m$
Moon's apparent N.P.D.	$69.33.40.93 + 0.0130 t + 0.0567 \tau + 0.0029 x + 1.0093 y + 2.0550 m$
Moon's apparent Semidiameter	$14.58.49 + 0.0005 t + 0.8985 n.$

Apparent Distance of Star from Moon's centre:

$$14'. 58'',59 + 0'',7621 \times \{ - e + 0.4494 t + 0.5331 \tau + 1.0056 x - 0.0034 y + 1.8307 m \} \\ + 0'',5817 \times \{ + 0.0130 t + 0.0567 \tau + 0.0029 x + 1.0093 y + 2.0550 m \} \\ - 0'',5807 \times f.$$

Final Equation:

$$- 0'',10 = - 0.7621 e - 0.5807 f + 0.7681 x + 0.5845 y + 0.3496 t + 0.4393 \tau + 2.5906 m - 0.8985 n.$$

Reappearance of H. C. 12358, Oct. 3, $14^h.12^m.59^s.03 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$46.12.53.40 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc.....	$94.43.7.35 + 0.5301 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$69.1.49.50 + 0.0556 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$54.27.16 \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter.....	$14.50.30 \times (1 + 0.001 n)$
Star's Right Ascension in arc.....	$94.55.27.90 + e''$
Star's N.P.D.	$69.40.8.90 + f.$
Moon's apparent Right Ascension in arc $95.10.7.51 + 0.4300t + 0.5336\tau + 1.0069x - 0.0030y + 1.6314m$	
Moon's apparent N.P.D.	$69.34.16.08 + 0.0187t + 0.0576\tau + 0.0026x + 1.0105y + 1.9691m$
Moon's apparent Semidiameter.....	$14.59.66 + 0.0005t + 0.8997n.$

Apparent Distance of Star from Moon's centre:

$$14'.56''.86 + 0''.8620 \times \{-e + 0.4300t + 0.5336\tau + 1.0069x - 0.0030y + 1.6314m\} \\ - 0''.3927 \times \{+0.0187t + 0.0576\tau + 0.0026x + 1.0105y + 1.9691m\} \\ + 0''.3941 \times f.$$

Final Equation :

$$+ 2''.80 = - 0.8620e + 0.3941f + 0.8669x - 0.3994y + 0.3628t + 0.4373\tau + 0.6330m - 0.8997n.$$

Reappearance of ν Geminorum, Oct 3, $14^h.13^m.18^s.98 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$46.17.53.40 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc.....	$94.43.18.00 + 0.5302 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$69.1.50.62 + 0.0557 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$54.27.16 \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter.....	$14.50.30 \times (1 + 0.001 n)$
Star's Right Ascension in arc.....	$94.56.28.80 + e''$
Star's N.P.D.	$69.41.44.30 + f.$
Moon's apparent Right Ascension in arc $95.10.16.16 + 0.4298t + 0.5337\tau + 1.0069x - 0.0030y + 1.6294m$	
Moon's apparent N.P.D.	$69.34.16.47 + 0.0188t + 0.0577\tau + 0.0026x + 1.0105y + 1.9684m$
Moon's apparent Semidiameter.....	$14.59.67 + 0.0005t + 0.8997n.$

Apparent Distance of Star from Moon's centre:

$$14'.55''.64 + 0''.8119 \times \{-e + 0.4298t + 0.5337\tau + 1.0069x - 0.0030y + 1.6294m\} \\ - 0''.4994 \times \{+0.0188t + 0.0577\tau + 0.0026x + 1.0105y + 1.9684m\} \\ + 0''.5006 \times f.$$

Final Equation :

$$+ 4''.03 = - 0.8119e + 0.5006f + 0.8162x - 0.5071y + 0.3391t + 0.4045\tau + 0.3399m - 0.8997n.$$

Disappearance of ι Tauri, Nov. 25, 10^h. 52^m. 39^s. 48 + $t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	48°. 14'. 7". 20 + 15". 0411 $\times t$
Moon's Geocentric Right Ascension in arc	73°. 1'. 46. 80 + 0. 5307 $\times (t + \tau) + x$
Moon's Geocentric N.P.D.	68°. 20'. 5. 84 - 0. 0124 $\times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	53°. 54. 20 $\times (1 + 0. 001 m)$
Moon's Geocentric Semidiameter	14°. 41. 30 $\times (1 + 0. 001 n)$
Star's Right Ascension in arc	73°. 28'. 3. 30 + e
Star's N.P.D.	68°. 38'. 11. 90 + f .
Moon's apparent Right Ascension in arc	73°. 16'. 51". 32 + 0". 3930 t + 0". 5358 τ + 1". 0095 x - 0". 0018 y + 0". 9131 m
Moon's apparent N.P.D.	68°. 48'. 47. 17 - 0. 0342 t - 0. 0118 τ + 0. 0015 x + 1. 0128 y + 1. 7441 m
Moon's apparent Semidiameter	14°. 52. 58 + 0. 0002 t + 0. 8926 n .

Apparent Distance of Star from Moon's centre:

$$14'. 52'', 01 + 0'', 6542 \times \{ + e - 0, 3930 t - 0, 5358 \tau - 1, 0095 x + 0, 0018 y - 0, 9131 m \} \\ + 0'', 7126 \times \{ - 0, 0342 t - 0, 0118 \tau + 0, 0015 x + 1, 0128 y + 1, 7441 m \} \\ - 0'', 7118 \times f.$$

Final Equation :

$$+ 0'', 57 = + 0, 6542 e - 0, 7118 f - 0, 6594 x + 0, 7229 y - 0, 2817 t - 0, 3589 \tau + 0, 6455 m - 0, 8926 n.$$

Disappearance of ρ^3 Arietis, Dec. 20, 3^h. 59^m. 59^s. 37 + $t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	329°. 25'. 37". 50 + 15". 0411 $\times t$
Moon's Geocentric Right Ascension in arc	41°. 10'. 2. 85 + 0. 5089 $\times (t + \tau) + x$
Moon's Geocentric N.P.D.	72°. 6'. 57. 57 - 0. 1075 $\times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	54°. 12. 78 $\times (1 + 0. 001 m)$
Moon's Geocentric Semidiameter	14°. 46. 36 $\times (1 + 0. 001 n)$
Star's Right Ascension in arc	41°. 55'. 50. 70 + e
Star's N.P.D.	72°. 35'. 45. 80 + f .
Moon's apparent Right Ascension in arc	41°. 43'. 22". 00 + 0". 4640 t + 0". 5108 τ + 1". 0031 x - 0". 0031 y + 2". 0054 m
Moon's apparent N.P.D.	72°. 44'. 38. 28 - 0. 1482 t - 0. 1068 τ + 0. 0028 x + 1. 0066 y + 2. 2785 m
Moon's apparent Semidiameter	14°. 52. 24 + 0. 0006 t + 0. 8922 n .

Apparent Distance of Star from Moon's centre:

$$14'. 51'', 26 + 0'', 7654 \times \{ + e - 0, 4640 t - 0, 5108 \tau - 1, 0031 x + 0, 0031 y - 2, 0054 m \} \\ + 0'', 5979 \times \{ - 0, 1482 t - 0, 1068 \tau + 0, 0028 x + 1, 0066 y + 2, 2785 m \} \\ - 0'', 5971 \times f.$$

Final Equation :

$$+ 0'', 98 = + 0, 7654 e - 0, 5971 f - 0, 7661 x + 0, 6042 y - 0, 4444 t - 0, 4548 \tau - 0, 1726 m - 0, 8922 n.$$

Reappearance of ρ^3 Arietis, Dec. 20, $5^h.3^m.32^s.85 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$345^\circ.21'.36''.30 + 15''.0411 \times t$
Moon's Geocentric Right Ascension in arc	$41^\circ.42'.24''.30 + 0,5093 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$72^\circ.0'.10''.21 - 0,1063 \times (t + \tau) + y$
Moon's Horizontal Equatoreal Parallax	$54'.12''.10 \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$14'.46''.18 \times (1 + 0,001 n)$
Star's Right Ascension in arc.....	$41^\circ.55'.50''.70 + e''$
Star's N.P.D.	$72^\circ.35'.45''.80 + f.$
Moon's apparent Right Ascension in arc	$42^\circ.11'.41''.73 + 0,4284 t + 0,5124 \tau + 1,0056 x - 0,0028 y + 1,7673 m$
Moon's apparent N.P.D.....	$72^\circ.35'.22''.28 - 0,1428 t - 0,1060 \tau + 0,0025 x + 1,0089 y + 2,1331 m$
Moon's apparent Semidiameter.....	$14'.54''.09 + 0,0005 t + 0,8941 n.$

Moon's Apparent Semidiameter + $5''.75$ = Apparent Distance of Star from Moon's centre =

$$15'.7''.78 + 0'',9537 \times \{ -e + 0,4284 t + 0,5124 \tau + 1,0056 x - 0,0028 y + 1,7673 m \} \\ - 0'',0252 \times \{ -0,1428 t - 0,1060 \tau + 0,0025 x + 1,0089 y + 2,1331 m \} \\ + 0'',0266 \times f.$$

Final Equation :

$$- 7'',94 = - 0,9537 e + 0,0266 f + 0,9590 x - 0,0281 y + 0,4117 t + 0,4913 \tau + 1,6317 m - 0,8941 n.$$

HOURLY METEOROLOGICAL OBSERVATIONS MADE AT THE CAMBRIDGE OBSERVATORY
NEAR THE TIME OF THE SPRING EQUINOX. 1844.

Day and Hour.	Barom.	Att. Ther.	Exter. Ther.	Clouds 0-10.	Class of Clouds.	Direction of Wind.	Strength of Wind 0-6.	Remarks.
h.	Inches.	o	o					
Mar. 20. 18	29,982	35,2	30,4	1	Nimbi	W. N. W.	1,2	Few clouds about horizon, otherwise clear.
19	,988	34,3	32,1	1	.....	N. N. W.	1	... ..
20	30,000	35,0	34,0	0	.....	N. N. W.	1,2	Quite clear.
21	,018	36,0	36,1	0	.....	N. N. W.	1	...
22	,042	38,0	38,0	1	Cumuli	N. N. W.	1	Very fine and bright: amali scattered cumuli.
23	,048	39,7	41,8	2	.....	N. N. W.	1	... ..
Mar. 21. 0	,048	40,5	42,0	7	Cumuli and Nimbi	N. by W.	1,2	Fine, but more clouded.
1	,044	41,2	42,1	6	.....	W. N. W.	1,2	... ..
2	,030	41,7	44,2	5	.....	N. W.	1,2	... ..
3	,024	42,2	44,8	4	.....	N. N. W.	0,1	... ..
4	,010	42,5	44,5	3	Cirri and Cumuli	N. W.	0,1	... ..
5	,000	42,5	43,8	7	Cirri	W. S. W.	1	... ..
6	29,998	41,9	41,0	5	Cirri and Stratus	W. S. W.	0,1	... ..
7	,988	40,9	38,9	7	Stratus and Nimbi	S. W.	1	Very hazy.
8	,968	39,7	36,2	3	Stratus	S. W.	0,1	...
9	,950	37,6	35,0	3	.....	S. W.	1	Hazy.
10	,944	37,3	34,1	2	.....	S. W.	1	Hazy: clouds in N.W. horizon.
11	,924	36,7	33,1	3	Nimbi	S. W.	1	Dark clouds in N.W. and others rising, with wind.
12	,896	36,2	32,9	9	.....	W. S. W.	1	... ..
13	,854	35,0	32,2	4	.....	S. W.	1	... ..
14	,840	34,9	33,0	10	.....	S. S. W.	1,2	... ..
15	,822	36,1	35,4	10	.....	S. S. W.	1,2	... ..
16	,804	36,4	35,4	10	.....	S. W.	1,2	... ..
17	,798	37,0	35,5	10	.....	S. S. W.	1,2	Atmosphere clear.
18	,790	37,1	35,6	10	.....	S. S. W.	1,2	... ..
19	,772	37,4	36,5	10	.....	S. S. W.	1,2	... ..
20	,756	38,4	39,0	9	.....	S. S. W.	1,2	... ..
21	,738	39,8	40,9	6	.....	S. S. W.	2	Very fine.
22	,710	42,4	44,1	8	.....	S. S. W.	2	... Wind stronger and rather gusty.
23	,698	43,6	44,9	7	Nimbi and Cumuli	S. S. W.	2	... ..
Mar. 22. 0	,678	45,8	47,7	9	.....	S. S. W.	1,2	... ..
1	,650	46,0	48,4	9	.....	S. W.	1,2	... ..
2	,628	46,7	48,4	8	.....	S. W.	1,2	Wind rather stronger.
3	,608	46,9	47,7	7	.....	S. W.	1,2	... ..
4	,596	46,6	47,0	8	.....	S. S. W.	2	... ..
5	,566	46,0	45,9	9	Nimbi	S. by W.	1,2	... ..
6	,580	45,0	44,5	10	.....	S. S. W.	1,2	... ..

HOURLY METEOROLOGICAL OBSERVATIONS MADE AT THE CAMBRIDGE OBSERVATORY
NEAR THE TIME OF THE SUMMER SOLSTICE, 1844.

Day and Hour.	Barom.	Att. Ther.	Exter. Ther.	Clouds 0-10.	Class of Clouds.	Direction of Wind.	Strength of Wind 0-6.	Remarks.
<i>h.</i>	<i>Inches.</i>	<i>o</i>	<i>o</i>					
June 20. 18	30,010	57,8	58,1	4	Cirri and Cirro-cumuli	S.S.W.	1,2	Brisk wind, with Stratus in the horizon.
19	,004	58,8	60,4	6	Cumulus and Cirro-cumuli	S.S.W.	1,2	The wind about the same: some cumulo-stratus in the S.S.W.
20	,016	59,7	60,9	9	Nimbi and Cirro-stratus	S.W.	2	The wind has increased a little: clouds dark and heavy in S.W.
21	,020	59,5	59,5	8	Nimbi	S.W.	2	A few minutes before the observation a slight rain fell from S.W.
22	,014	60,5	63,0	6	Cirri and Cumuli	S.W.	2	Clouds breaking: cirro-cumuli towards the east.
23	,014	66,9	69,3	6	Cirro-cumulus and Cumulus	S.W.	2	Clouds lighter and of finer texture: the Sun shining brightly.
June 21. 0	30,000	67,2	69,9	7	Cirri and Cirro-cumuli	S.W.	2	... ..
1	29,998	69,0	73,4	5	.....	S.W.	2	The wind a little stronger.
2	,980	70,0	74,4	7	.....	S.S.W.	1,2	The wind slightly abated. Cumuli in N. and E.: S. horizon very clear.
3	,979	70,9	74,0	8	Cirri and Cumuli	S.W.	1,2	A great deal of stratus in the E.
4	,936	70,9	72,9	9	Nimbi and Cumuli	S.W.	1,2	Nearly overcast.
5	,920	70,4	72,6	9	Nimbi and Cirri	S.W.	1,2	... .. Some cumuli in the W.
6	,904	69,9	71,5	7	.....	S.W.	1,2	Dark clouds in the S.
7	,900	68,5	68,5	8	Cirro-cumulus and Nimbus	S.S.W.	1,2	... .. N.: cirri in the zenith.
8	,882	66,9	65,0	7	Nimbi	S.S.W.	0,1	Nearly clear in the zenith: scarcely any wind.
9	,870	65,0	62,5	8	.....	S.S.W.	0,1	Dense clouds extending from S.W. to N.E.: hazy in the zenith: nearly calm: lightning in the N.W. and E.
10	,860	63,8	61,0	9	.....	S.S.W.	0,1	Light fleecy clouds in the zenith.
11	,844	63,2	59,5	8	.....	S.S.W.	0,1	Stars are visible in the zenith: a warm night.
12	,818	62,8	58,5	4	.....	S.W.	0,1	Clouds much broken: very bright in N. horizon.
13	,802	62,0	58,6	9	.....	S.W.	0,1	Sky obscured except in the N. horizon: very calm and warm.
14	,792	62,5	57,1	9	.....	S.	0,1	A break in the clouds in the N. horizon.
15	,777	60,8	56,5	10	.....	S. by W.	0	The clouds fast breaking: quite calm.
16	,770	60,2	55,9	9	.....	S. by W.	0	The clouds very threatening.
17	,784	59,4	57,4	9 $\frac{1}{2}$	Nimbi and Stratus	S. by W.	0	Stratus near the horizon from E. to S.E.: clouds breaking, and the Sun shining feebly.
18	,790	60,5	61,0	10	.....	S.S.W.	0,1	Small patches of blue sky, and a few stratus. A very slight wind.
19	,804	61,5	62,4	10	Nimbi	W. by S.	1,2	Sky covered by clouds, but not heavily, and the Sun visible through them.
20	,824	62,4	64,3	9	.....	S.W.	1	Clouds very thin, and Sun shining through them.
21	,828	63,9	66,3	9	.....	W.N.W.	0,1	A very small portion of blue sky to S. Sun shining feebly.
22	,846	64,3	67,5	8	Nimbi and Cumuli	S.W.	0,1	The portion of blue sky in the S. has slightly increased.
23	,840	64,9	67,0	7	Cumulus and Cirro-cumuli	W.S.W.	0,1	Stratus in N. a clear break in S. extending to E.; also a streak of blue sky in N.: Sun not visible.
June 22. 0	,854	67,0	72,8	4	Cirri and Cumulus	S.W.	0,1	Cumulo-stratus extending from W.S.W. to N.E. Sun shining brightly.
1	,858	68,7	72,1	6	.....	W.S.W.	0,1	The cumulo-stratus has entirely disappeared.
2	,868	69,9	73,1	7	Cumuli	S.W.	1	A few cirri in the N.: the wind has risen.
3	,868	70,1	73,9	4	.....	S.W.	1	The wind has slightly increased.
4	,860	70,7	74,4	4	.....	S.W.	0,1	Streaks of cirri extending from W.S.W. to N.E.
5	,860	70,5	74,9	4	.....	W.N.W.	0,1	Stratus in the N. horizon.
6	29,856	69,9	73,2	5	.....	S.W.	0,1	... .. : clear in zenith; very calm.

**HOURLY METEOROLOGICAL OBSERVATIONS MADE AT THE CAMBRIDGE OBSERVATORY
NEAR THE TIME OF THE AUTUMNAL EQUINOX, 1844.**

Day and Hour.	Barom.	Att. Ther.	Exter. Ther.	Clouds 0-10.	Class of Clouds.	Direction of Wind.	Strength of Wind 0-6.	Remarks.
a.	Inches.	o	o					
Sept. 20. 21	30,174	55,8	57,3	4	Cumuli and Cumuli-stratus	N.E. by N.	2	Clouds all round horizon and small patches above. Unsteady wind.
22	,180	57,6	58,0	9	Cumuli and Nimbi	N.E.	2	Very little blue sky. Wind rather gusty.
23	,182	57,5	59,1	8	Cumuli	N.E.	2	Atmosphere clear.
Sept. 21. 0	,200	58,0	58,0	10	Cumuli and Nimbi	N.E.	1,2	Clouds more dingy.
1	,200	58,2	58,5	9	.....	N.E.	2	... ..
2	,200	58,5	58,8	9	.....	N.E.	2	Clouds lighter except in S. and S.E. horizon.
3	,200	58,1	57,8	10	Nimbi	N.E. by E.	1,2	Quite cloudy.
4	,200	57,4	56,5	9	Nimbi and Stratus	N.E.	2	Rainy looking. Clouds in S. and S.E.
5	,200	56,7	54,4	9	Stratus	N.E.	2	Clearer in the East.
6	,202	56,0	54,2	10	Nimbi	N.E.	1,2	Quite cloudy.
7	,218	55,3	53,0	10	.....	N.N.E.	1,2	...
8	,220	54,7	52,1	9	.....	N.N.E.	1,2	Clouds much broken.
9	,210	52,8	48,7	1	Stratus	N.N.E.	1	Quite clear, except in N.W. and N.E.
10	,210	51,2	47,2	3	Nimbi	N.N.E.	1	Clouds rising in E., and Moon nearly clouded.
11	,210	51,2	48,5	7	.....	N.N.E.	1,2	Clear only in N.E.
12	,208	50,8	44,9	4	.....	N.N.E.	1	Clouds rising in N. and disappearing in S.
13	30,200	50,7	47,0	10	.....	N.N.E.	1	Quite cloudy: gentle wind and milder temperature.

**HOURLY METEOROLOGICAL OBSERVATIONS MADE AT THE CAMBRIDGE OBSERVATORY
NEAR THE TIME OF THE WINTER SOLSTICE, 1844.**

Dec. 20. 18	30,372	31,6	26,5	2	Nimbi	N.E.	1	A narrow bank of cloud extending from E. to W.: very cold.
19	,378	29,8	25,5	2	.....	N.E.	1	Cloud in the horizon extending from N.E. to W.: a few specks of cloud eastward towards zenith.
20	,382	28,8	25,5	8	Cirri and Cumuli	N.E.	1	Sky overcast: clouds passing quickly from E. and N.E.
21	,382	29,0	27,0	8	Cumuli	N.E.	1	Generally cloudy: horizon in N. clear: Sun visible: clouds of a fleecy texture.
22	,394	30,4	30,0	7	.....	N.E.	1	Clouds in S. rather dense: broken towards zenith: N. pretty clear.
23	,402	32,0	33,5	9	.....	N.E.	1	The sky almost entirely clouded: Sun not visible. Clouds denser though of a fleecy texture.
Dec. 21. 0	,400	33,5	34,8	8	.....	E. by N.	1	The clouds more broken: Sun visible.
1	,398	34,1	34,5	7	.....	.....	1,2	Pretty clear in zenith: Sun just visible: clouds dense in S.
2	,400	34,5	34,6	9	.....	N.E.	1,2	Sky almost entirely overcast: a very small portion of blue sky in N. horizon.
3	,396	34,5	34,1	10	.....	N.E.	2	Sky completely overcast: clouds of a fleecy texture: wind rather brisk and cold.
4	,400	34,2	33,4	10	.....	N.E.	2	Clouds denser: in other respects the same as above.
5	,398	33,8	32,9	9	Nimbi	N.E.	2	Generally cloudy: a narrow break in the South.
6	,398	33,1	31,9	6	.....	N.E.	2	Clouds broken up: Moon visible: wind brisk.
7	,400	32,9	31,4	3	Cirri-Cumuli	N.E.	2	Clouds moving rapidly: almost entirely disappeared.
8	,404	31,9	29,5	2	.....	N.N.E.	2	Brilliantly clear: a few very light fleecy clouds moving rapidly towards zenith: some stratus in S.E. horizon.
9	,402	31,1	29,0	9	.....	N.N.E.	2	Very cloudy: no stars visible: a small patch of blue sky from S. to S.S.E.
10	,402	31,3	29,1	8	.....	N.N.E.	2	Clouds more broken: stars visible in the N.: clouds light and fleecy.
11	,400	31,1	30,3	10	.....	N.N.E.	2	Quite cloudy: no stars visible.
12	30,392	31,0	29,4	1	.....	N.N.E.	2	Brilliantly clear: slight appearance of stratus in the horizon extending entirely round.

APPARENT RIGHT ASCENSIONS

OBSERVED WITH THE TRANSIT

IN THE YEAR 1845.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	s.	h. m. s.			
1844. Dec. 31	(a) Aldebaran	52,3	6,9	21,1	35,2	48,9	3,1	4. 27. 16,9	26. 34,91	35,31	28,96	1,04				M	
1845. Jan. 1	(b) α Ceti	2,4	15,1	28,9	42,2	55,9	....	2. 54. 22,6	53. 42,34	42,77	29,96					M
	ζ Arietis	48,9	3,5	17,3	31,9	46,3	0,2	3. 6. 15,2	5. 31,91	32,30				3. 6. 2,26		M	
	α Persei	47,6	8,2	28,9	49,8	10,4	30,9	3. 13. 51,8	12. 49,66	49,88				3. 13. 19,85		M	
	(c) η Tauri	4,8	19,9	34,2	48,9	4,1	18,1	3. 38. 32,1	37. 48,87	49,23				3. 38. 19,22		M	
Jan. 7	(c) H. C. 13540	14,2	29,0	43,9	58,2	12,9	28,1	6. 52. 43,5	51. 58,55	58,91		0,87		6. 52. 34,22		M	
	(d) Σ 1033.	54,0	15,8	38,2	0,9	23,3	44,8	7. 3. 7,2	2. 0,61	0,80				7. 2. 36,11		M	
	δ Geminorum	35,1	49,7	4,0	18,6	33,2	47,5	7. 11. 2,3	10. 18,63	19,01				7. 10. 54,33		M	
	ν Geminorum	3,4	18,8	34,0	49,1	3,9	19,1	7. 26. 33,9	25. 48,89	49,24				7. 26. 24,57		M	
	Procyon	57,2	10,9	24,3	37,8	51,2	4,7	7. 31. 18,2	30. 37,76	38,20	35,35					M	
	(e) Pollux .....	....	....	1,0	16,4	31,8	47,2	7. 36. 2,4	35. 16,45	16,79	35,31					M
	(c) δ Cancri	40,8	56,1	11,5	26,2	42,0	57,3	7. 54. 12,1	53. 26,57	26,91				7. 54. 2,26		M	
Jan. 18	(f) δ Cancri	23,9	39,1	54,0	9,2	24,3	39,9	7. 53. 56,0	53. 9,49	9,90		0,85		7. 54. 2,20		M	
	ρ Argūs	22,0	36,5	51,1	6,2	20,9	35,2	8. 0. 50,0	0. 5,99	6,74				8. 0. 59,04		M	
	(g) η Cancri	11,2	25,6	39,9	54,2	8,9	....	8. 23.	22. 54,38	54,85				8. 23. 47,17		M
	ε Hydræ	2,8	16,4	29,9	43,2	57,1	10,9	8. 38. 24,2	37. 43,51	44,08	52,33					M	
	ι Ursæ Majoris	44,0	4,2	23,8	44,5	5,2	25,5	8. 48. 45,9	47. 44,73	45,02				8. 48. 37,35		M	
Jan. 20	α Pegasi .....	....	41,2	55,1	8,9	23,2	36,9	22. 56. 51,0	56. 9,10	9,62	53,29	1,03		22. 57. 3,25		M
	α Arietis	49,9	4,4	18,8	33,5	48,6	3,2	1. 58. 17,8	57. 33,74	34,20	54,09			1. 58. 27,96		M	
	Σ 1348.	45,3	59,0	12,8	26,2	39,9	53,5	9. 16. 7,1	15. 26,26	26,83				9. 16. 20,90		M	
	α Hydræ	24,9	38,6	52,1	5,4	19,2	32,9	9. 19. 46,6	19. 5,67	6,31	54,35			9. 20. 0,38		M	
	λ Leonis	17,1	31,0	45,2	59,9	14,8	29,4	9. 22. 44,2	22. 0,23	0,68				9. 22. 54,75		M	
	α Herculis	59,2	12,9	26,3	39,8	54,2	8,1	17. 7. 21,9	6. 40,35	40,87	54,12			17. 7. 35,27		M	
Jan. 21	ι Aurigæ	13,5	29,8	45,9	1,5	17,9	33,5	4. 46. 49,2	46. 1,62	1,99		1,08		4. 46. 56,96		M	
	Rigel	31,2	44,5	58,2	12,0	25,4	39,2	5. 6. 52,8	6. 11,91	12,56	55,00			5. 7. 7,54		M	
	(g) B. v. 303.	35,4	49,2	2,5	16,0	29,2	43,0	5. 12. 56,1	12. 15,91	16,49				5. 13. 11,47		M	
	β Tauri	51,1	6,3	21,9	37,2	52,8	8,0	5. 16. 23,1	15. 37,20	37,61	54,88			5. 16. 32,60		M	
	δ Orionis	32,1	45,0	58,9	12,1	25,9	39,0	5. 23. 52,2	23. 12,18	12,79				5. 24. 7,78		M	
	(h) α Orionis	13,1	26,5	40,1	53,2	7,1	20,6	5. 46. 34,8	45. 53,63	54,19	55,10			5. 46. 49,20		M	
	γ Geminorum	10,1	24,2	38,1	52,0	6,5	20,4	6. 28. 34,3	27. 52,24	52,75				6. 28. 47,79		M	
	(c) Σ 953.	7,1	20,5	34,2	48,1	1,9	15,5	6. 32. 29,2	31. 48,07	48,63				6. 32. 43,67		M	
	(i) Sirius	43,8	58,1	11,5	25,8	40,2	54,0	6. 38. 7,9	37. 25,90	26,59	54,97			6. 38. 21,64		M	
	(k) Castor. sp.	1,5	17,2	33,0	48,9	5,1	20,9	7. 24. 37,0	23. 49,09	49,47	55,21			7. 24. 44,55		M	
	Procyon	37,2	50,9	4,5	17,8	31,4	45,1	7. 30. 58,5	30. 17,92	18,50	55,18			7. 31. 13,59		M	
	Pollux	10,9	26,1	41,3	56,8	12,3	27,8	7. 35. 43,0	34. 56,89	57,30	54,95			7. 35. 52,39		M	
	δ Cancri	21,0	36,1	51,0	6,6	22,2	37,1	7. 53. 53,0	53. 6,72	7,13				7. 54. 2,24		M	
	μ ¹ Cancri	30,3	45,1	59,9	14,1	29,2	44,1	7. 56. 58,2	56. 14,42	14,88				7. 57. 9,99		M	
Jan. 24	B.A.C. 1661.	20,1	33,5	47,1	1,0	14,1	27,5	5. 13. 41,0	13. 0,62	1,21		1,02		5. 13. 59,31		M	
	(l) B. v. 802.	44,2	58,5	11,3	25,1	38,5	52,1	5. 31. 6,3	30. 25,14	25,71				5. 31. 23,82		M	
	B. v. 1015.	53,5	7,1	20,8	34,1	47,9	1,4	5. 39. 15,2	38. 34,29	34,85				5. 39. 32,97		M	
	α Orionis	9,2	23,5	37,1	50,4	3,9	17,2	5. 46. 31,2	45. 50,36	50,92	58,35			5. 46. 49,05		M	
	Sirius	40,6	55,1	8,9	22,6	37,2	51,3	6. 38. 4,9	37. 22,95	23,64	57,91			6. 38. 21,80		M	
	Castor. sp.	58,5	15,0	30,5	46,4	2,6	17,9	7. 24. 34,0	23. 46,42	46,80	57,89			7. 24. 44,99		M	
	(i) Procyon	34,4	47,9	1,2	14,8	29,0	41,6	7. 30. 55,2	30. 14,87	15,45	58,24			7. 31. 13,65		M	
	Pollux	7,8	22,9	37,5	53,3	9,1	24,2	7. 35. 39,5	34. 53,48	53,89	58,67			7. 35. 52,09		M	
	μ ¹ Cancri	26,9	42,0	56,2	10,9	26,0	39,8	7. 56. 55,0	56. 10,98	11,44				7. 57. 9,66		M	
	(c) Σ 1200.	36,5	56,2	18,5	39,1	1,0	22,1	8. 4. 43,0	3. 39,49	39,66				8. 4. 37,88		M	
	η Cancri.	5,9	20,0	33,8	48,5	2,9	17,1	8. 23. 31,8	22. 48,58	49,05				8. 23. 47,29		M	
	ρ ³ Cancri	40,5	55,9	11,1	26,2	41,7	56,9	8. 46. 11,8	45. 26,30	26,70				8. 46. 24,95		M	
	σ ² Cancri	17,2	31,7	45,4	59,3	3,8	27,2	8. 48. 41,7	47. 59,48	59,99				8. 48. 58,24		M	
	α Hydræ	20,9	35,1	48,3	1,9	16,0	28,9	9. 19. 43,0	19. 2,02	2,66	58,06			9. 20. 0,94		M	
Jan. 27	(i) Castor. sp.	55,4	11,5	27,3	43,0	58,9	15,0	7. 24. 30,8	23. 43,14	43,47	61,23	0,94		7. 24. 44,65		M	
	Procyon	31,3	44,8	58,2	11,8	25,5	38,8	7. 30. 52,9	30. 11,91	12,47	61,22			7. 31. 13,65		M	
	Pollux	4,8	20,1	35,2	50,9	6,5	21,4	7. 35. 36,8	34. 50,82	51,19	61,08			7. 35. 52,38		M	

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = +0",31. LEVEL Error = +1",42. From Jan. 18 = +0",90
From Jan. 27 = +0",33. AZIMUTH Error = +6",51. From Jan. 18 = +10",03.

(a) Used for Clock-rate. (b) Very faint. Wire VII was written down 26,2; it is altered conjecturally. (c) Faint.
(d) The noted time has been increased by 1^m; there was no star near this. (e) Loss of wires caused by a disturbance.
(f) High wind. (g) Cloudy. (h) Irregular intervals. (i) Indefinite. (k) The practice of Mr Morgan was to take the preceding star of Castor. The difference of the R.A. of the two stars is assumed to be 0",34. (l) Very faint. Wire I has been increased 1^s conjecturally.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.				
Jan. 29	(a) Castor. <i>sp.</i>	53,9	9,2	25,4	41,1	57,8	13,1	7. 24. 29,2	23. 41,39	41,72	62,98	0,82	7. 24. 44,66	M			
	Procyon.....	29,2	43,1	56,3	9,9	24,1	37,0	7. 30. 50,9	30. 10,08	10,64	63,06		7. 31. 13,59	M			
	Pollux.....	2,9	18,7	33,3	48,9	4,8	19,9	7. 35. 35,1	34. 49,09	49,46	62,82		7. 35. 52,41	M			
	μ^1 Cancri.....	22,1	36,9	51,8	6,1	21,0	35,9	7. 56. 50,5	56. 6,33	6,75			7. 57. 9,70	M			
	Σ 1200.....	31,8	53,1	13,5	34,8	56,1	16,8	8. 4. 38,1	3. 34,89	35,00			8. 4. 37,96	M			
Jan. 30	(b) ρ Orionis.....	28,9	42,5	56,1	9,2	23,1	36,4	5. 4. 49,9	4. 9,45	10,01	63,67	0,77	5. 5. 13,66	M			
	α Orionis.....	4,4	17,8	31,1	44,9	58,8	12,3	5. 46. 25,9	45. 45,03	45,57				M			
	(c) B. v. 1359.....	6,1	19,7	33,5	47,0	0,6	13,8	5. 52. 28,1	51. 46,97	47,51			5. 52. 51,19	M			
	(b) Sirius.....	35,1	49,0	3,2	16,9	31,5	45,1	6. 37. 59,2	37. 17,14	17,82		63,70		M			
Feb. 3	α Persei.....	10,2	51,1	51,9	11,9	33,0	53,3	3. 13. 13,5	12. 12,13	12,35	67,38	0,80	3. 13. 19,55	M			
	(d) Piazzii VIII. 131..	19,5	40,6	1,3	21,7	41,9	2,8	8. 32. 23,5	31. 21,62	21,84			8. 32. 29,21	M			
	(e) ϵ Hydræ.....	47,9	1,5	15,1	28,8	42,1	55,5	8. 38. 9,2	37. 28,59	29,17				M			
	ρ^8 Cancri.....	31,4	46,6	1,9	17,1	32,9	47,5	8. 46. 3,4	45. 17,26	17,68			8. 46. 25,06	M			
	(f) σ^2 Cancri.....	8,0	22,6	36,1	50,4	4,8	18,6	8. 48. 32,5	47. 50,43	50,95			8. 48. 58,33	M			
Feb. 4	(g) Polaris.....	....	29,5	1,4	32,5	2,6	35,4	1. 28. 5,5	2. 32,14	20,92	67,99	0,76		M		
	(h) δ Ursæ Minoris SP.	....	....	....	41,2	....	13,4	6. 32. 1,2	20. 40,45	46,36				M
	(a) Sirius.....	31,0	44,8	58,8	12,4	26,9	40,9	6. 37. 54,7	37. 12,79	13,49				M			
Feb. 5	(b) Polaris.....	....	....	....	....	....	32,1	1. 28. 5,9	2. 30,29	19,07	69,00	0,92		M
	δ Ursæ Minoris SP.	....	....	50,5	40,8	....	....	6. 31. 59,4	20. 39,47	45,30				M
	δ Leonis.....	1,2	15,4	29,8	44,3	58,9	13,0	11. 5. 27,8	4. 44,35	44,84			11. 22. 25,87	M			
	ϵ Leonis.....	36,1	49,1	2,7	16,2	30,1	42,9	11. 21. 56,5	21. 16,23	16,86			11. 39. 41,76	M			
	B. xi. 701.....	51,3	5,1	18,7	32,1	45,8	59,1	11. 39. 13,0	38. 32,16	32,74				M			
Feb. 6	H. C. 4925.....	43,2	57,1	11,3	25,2	39,7	53,4	2. 31. 7,2	30. 25,30	25,82	69,86	0,89	2. 31. 35,53	M			
	α Ceti.....	21,6	34,9	48,2	1,9	15,7	28,6	2. 53. 42,1	53. 1,86	2,45			2. 54. 12,18	M			
	(a) α Orionis.....	57,9	11,2	24,9	38,3	52,1	5,8	5. 46. 19,3	45. 38,50	39,07		70,10	5. 46. 48,90	M			
	B. v. 1359.....	59,5	13,1	26,1	40,0	53,7	7,1	5. 52. 20,9	51. 40,06	40,64			5. 52. 50,48	M			
	1 Geminorum.....	....	....	19,5	34,1	48,9	3,3	5. 54. 18,2	53. 34,14	34,61			5. 54. 44,45	M	
	H. C. 12053.....	25,1	39,2	53,7	8,1	22,8	37,0	6. 10. 51,2	10. 8,16	8,65			6. 11. 18,50	M			
	15 Geminorum.....	....	....	....	24,2	39,2	53,4	6. 18. 7,9	17. 24,54	25,03			6. 18. 34,88	M
	γ Geminorum.....	55,7	9,4	23,8	37,7	51,9	5,8	6. 28. 19,4	27. 37,67	38,20			6. 28. 48,06	M			
	Σ 953.....	51,9	5,4	19,0	33,1	46,5	59,8	6. 32. 13,7	31. 32,78	33,36			6. 32. 43,22	M			
	Sirius.....	28,9	43,0	56,9	10,8	24,7	39,1	6. 37. 52,9	37. 10,91	11,61			6. 38. 21,47	M			
	Σ 1037.....	17,2	32,7	47,5	2,9	17,8	33,1	7. 2. 48,4	2. 2,81	3,25			7. 3. 13,13	M			
	Castor. <i>sp.</i>	46,8	3,0	18,9	35,1	51,0	6,5	7. 24. 22,2	23. 34,79	35,18		69,51		7. 24. 45,07	M		
	Feb. 7	β Tauri.....	35,5	50,8	6,1	21,9	36,8	51,9	5. 16. 7,3	15. 21,48		21,91	70,39	0,79	5. 16. 32,55	M	
		(i) α Orionis.....	57,1	10,2	24,1	37,9	51,5	4,4	5. 46. 18,1	45. 37,62		38,21	70,95		5. 46. 48,87	M	
(k) δ Ursæ Minoris SP.		....	....	....	38,1	....	10,6	6. 31. 56,2	20. 36,84	43,64			M	
(l) Sirius.....		....	....	55,9	10,2	24,5	38,1	6. 37. 51,9	37. 10,07	10,82	70,64		6. 38. 21,51	M	
(i) Procyon.....		21,9	35,1	48,2	1,9	15,8	29,2	7. 30. 43,0	30. 2,16	2,77	70,92		7. 31. 13,49	M			
Feb. 8	Pollux.....	55,3	10,9	25,9	41,2	56,9	11,8	7. 35. 27,1	34. 41,31	41,74	70,54		7. 35. 52,46	M			
	(a) α Orionis.....	56,6	10,1	23,3	37,1	50,9	4,1	5. 46. 17,8	45. 37,13	37,72	71,43	0,72	5. 46. 49,14	M			
	δ Ursæ Minoris SP.	16,4	5,9	50,1	39,0	25,1	12,9	6. 31. 59,8	20. 38,46	45,26				M			
	Sirius.....	27,1	41,2	55,0	9,2	23,8	37,5	6. 37. 51,4	37. 9,32	10,07	71,38		6. 38. 21,52	M			
	Castor. <i>sp.</i>	45,3	1,1	17,1	32,9	48,9	4,8	7. 24. 20,4	23. 32,94	33,32	71,37		7. 24. 44,79	M			
Feb. 11	Regulus.....	15,8	29,6	43,2	57,1	10,9	24,9	9. 59. 38,5	58. 57,14	57,70	71,70		10. 0. 9,25	M			
	α Ceti.....	17,9	31,6	44,8	58,2	12,1	25,5	2. 53. 38,7	52. 58,40	59,01	73,19	0,59	2. 54. 12,20	M			
	α Orionis.....	54,7	8,2	21,8	35,1	48,7	2,6	5. 46. 15,9	45. 35,29	35,88	73,24		5. 46. 49,14	M			
	(a) Sirius.....	25,4	39,6	53,2	7,5	21,8	35,7	6. 37. 49,4	37. 7,52	8,27	73,15		6. 38. 21,55	M			
	Castor. <i>sp.</i>	43,2	58,9	15,0	31,1	46,9	2,5	7. 24. 18,2	23. 30,83	31,21	73,46		7. 24. 44,51	M			
Feb. 12	Aldebaran.....	7,4	21,6	35,1	49,1	3,8	17,5	4. 26. 31,7	25. 49,46	50,00	73,88	0,51	4. 27. 3,80	M			
	(m) Rigel.....	12,2	25,5	39,1	52,8	6,7	20,1	5. 6. 33,9	5. 52,91	53,60	73,70		5. 7. 7,42	M			
	(m) δ Orionis.....	....	....	....	53,1	6,5	19,9	5. 23. 33,5	22. 53,04	53,69			5. 24. 7,51	M

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 0",31. LEVEL Error = + 0",33. From Feb. 3 = + 1",14. From Feb. 7 = + 0",72. AZIMUTH Error = + 10",03. From Feb. 7 = + 10",87.

(a) Indefinite. (b) Cloudy. (c) Perhaps 1" in excess. See Feb. 6. (d) Most probably the *sf.* star. See Feb. 21. (e) Field badly illuminated. (f) Hurried. (g) Very unsteady: Wire V uncertain. (h) Clouds and high wind. (i) Bad definition, the shutter not opening sufficiently. (k) Cloudy at intervals. (l) Taken hurriedly. (m) Through thin cloud: very faint.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Feb. 12	(a) ζ Tauri .....	....	....	....	....	25,9	40,1	5.	27.	54,2	27.	11,17	11,66		0,51	5.	28.	25,49	M
	(a) α Orionis	53,9	7,5	21,0	34,5	48,2	1,9	5.	46.	15,4	45.	34,63	35,22	73,88		5.	46.	49,05	M
Feb. 14	(b) δ Leonis	55,5	10,1	24,0	38,9	53,2	7,5	11.	5.	22,2	4.	38,78	39,32	74,68	0,50				M
Feb. 17	(c) Aldebaran	4,2	17,9	32,1	46,1	0,6	13,9	4.	26.	28,2	25.	46,14	46,75	77,05	0,91	4.	27.	3,70	M
	m Orionis. <i>nf.</i>	45,8	59,6	13,1	26,5	40,8	53,2	5.	14.	7,1	13.	26,59	27,30			5.	14.	44,28	M
	B. v. 623.	1,4	14,2	28,1	41,5	55,4	8,2	5.	24.	22,1	23.	41,56	42,25			5.	24.	59,23	M
	B. v. 1015.	34,1	47,2	0,6	14,5	28,2	41,9	5.	38.	55,5	38.	14,57	15,25			5.	39.	32,24	M
	α Orionis	50,6	4,4	17,9	31,6	45,1	58,5	5.	46.	12,0	45.	31,45	32,13	76,90		5.	46.	49,13	M
	1 Geminorum. ....	....	....	....	27,1	41,1	56,2	5.	54.	10,5	53.	26,72	27,27			5.	54.	44,27	M
	(d) δ Ursæ Minoris SP .....	....	1,7	44,6	34,4	....	8,2	6.	31.	53,8	20.	33,98	41,23						M
	Procyon	15,1	28,9	42,1	56,0	9,5	23,0	7.	30.	36,5	29.	55,87	56,57	77,06		7.	31.	13,63	M
	(e) Pollux	48,8	4,1	19,5	35,0	50,1	5,0	7.	35.	20,9	34.	34,77	35,26	76,96		7.	35.	52,33	M
	(f) Regulus .....	....	23,9	37,5	51,9	5,5	19,1	9.	59.	32,9	58.	51,57	52,20	77,28		10.	0.	9,36	M
	Σ 1439	38,8	53,1	7,5	22,1	36,7	51,0	10.	21.	5,5	20.	22,11	22,69			10.	21.	39,86	M
	48 Leonis	46,9	0,7	14,0	27,2	41,2	54,5	10.	26.	8,3	25.	27,55	28,23			10.	26.	45,40	M
	Σ 1457.	42,9	56,7	9,9	23,5	37,2	50,9	10.	30.	4,4	29.	23,65	24,34			10.	30.	41,52	M
	(g) α Hydræ .....	....	....	27,5	41,2	54,8	8,2	9.	19.	21,9	18.	41,12	41,89	79,02	0,93	9.	20.	0,89	M
Feb. 19	(h) λ Leonis .....	....	....	....	36,1	50,5	4,8	9.	22.	19,5	21.	35,66	36,20			9.	22.	55,20	M
	(g) Regulus	8,4	22,1	35,9	49,8	3,6	17,5	9.	59.	31,3	58.	49,80	50,43	79,06		10.	0.	9,46	M
	(b) ϵ Leonis	26,1	39,9	53,3	....	20,2	33,3	11.	21.	47,2	21.	6,60	7,36			11.	22.	26,44	M
	β Leonis	9,9	24,1	37,9	51,9	5,9	19,8	11.	40.	33,7	39.	51,89	52,50	79,05		11.	41.	11,59	M
Feb. 21	(i) Polaris	30,7	59,8	30,6	1,7	34,1	3,8	1.	28.	39,6	3.	2,90	51,41	27,59	0,55				M
	α Ceti	3,3	16,8	30,3	43,8	57,5	10,8	2.	54.	24,4	53.	43,84	44,41	27,61		2.	54.	12,18	M
	ω^s Tauri.	1,9	16,1	30,2	44,5	59,1	13,2	4.	8.	27,9	7.	44,70	45,18			4.	8.	12,97	M
	(k) α Orionis	39,8	53,0	6,9	20,1	33,8	47,9	5.	47.	0,5	46.	20,29	20,84	28,13		5.	46.	48,67	M
	15 Geminorum.	23,2	37,7	51,9	6,2	21,1	35,0	6.	18.	49,1	18.	6,32	6,80			6.	18.	34,64	M
	ν Geminorum.	11,0	26,2	41,3	56,5	11,9	27,0	7.	26.	41,9	25.	56,55	56,97			7.	26.	24,84	M
	Procyon.	4,4	18,0	31,7	44,9	58,8	12,1	7.	31.	25,9	30.	45,11	45,68	27,92		7.	31.	13,55	M
	Pollux	37,9	53,6	8,4	23,9	39,2	54,8	7.	36.	9,9	35.	23,96	24,37	27,82		7.	35.	52,24	M
	Piazzi VIII. 131. <i>np.</i>	58,2	18,9	39,8	0,6	21,5	41,9	8.	33.	2,5	32.	0,49	0,68			8.	32.	28,58	M
	ϵ Hydræ	27,9	41,0	54,2	8,0	21,6	35,0	8.	38.	48,5	38.	8,03	8,59	27,97		8.	38.	36,49	M
	(l) 48 Leonis .....	....	....	3,2	17,1	30,7	44,1	10.	26.	57,9	26.	17,01	17,56			10.	26.	45,50	M
	B. x. 1053.	0,6	14,2	27,5	41,0	54,9	8,2	10.	58.	22,1	57.	41,22	41,77			10.	58.	9,72	M
	δ Leonis	42,6	56,9	11,4	26,0	40,3	54,9	11.	6.	9,0	5.	25,87	26,35	27,74		11.	5.	54,30	M
	(c) Castor. <i>sp.</i>	26,8	42,9	58,4	14,5	30,9	46,4	7.	25.	2,6	24.	14,64	15,02	29,53	0,72	7.	24.	44,54	M
Feb. 24	(c) Procyon	2,9	16,4	30,0	43,1	56,9	10,3	7.	31.	23,9	30.	43,36	43,93	29,64		7.	31.	13,45	M
	Pollux.	36,6	51,9	7,1	22,0	37,5	52,9	7.	36.	8,3	35.	22,34	22,75	29,41		7.	35.	52,28	M
Feb. 28	(m) Aldebaran	47,9	1,8	15,9	29,5	44,1	57,9	4.	27.	12,0	26.	29,88	30,42	33,19	0,83	4.	27.	3,59	M
	Castor. <i>sp.</i>	22,9	39,0	54,9	11,0	27,1	42,5	7.	24.	58,3	24.	10,82	11,20	33,30		7.	24.	44,48	M
	Procyon.	58,9	12,6	25,9	39,5	53,0	6,5	7.	31.	20,1	30.	39,50	40,13	33,39		7.	31.	13,41	M
	Pollux.	32,6	48,0	3,1	18,5	34,0	49,1	7.	36.	4,5	35.	18,55	18,98	33,13		7.	35.	52,26	M
Mar. 1	(n) Castor. <i>sp.</i>	22,5	38,1	54,1	10,0	26,3	41,8	7.	24.	57,9	24.	10,11	10,49	33,99	0,84	7.	24.	44,57	M
	Procyon.	58,1	11,5	24,9	38,5	52,5	5,7	7.	31.	19,3	30.	38,65	39,28	34,23		7.	31.	13,36	M
	Pollux.	31,9	47,0	2,4	17,2	33,3	48,1	7.	36.	3,6	35.	17,65	18,08	34,02		7.	35.	52,17	M
Mar. 3	B. v. 324.	40,1	53,6	7,3	20,7	34,1	47,8	5.	14.	1,3	13.	20,71	21,33		0,81	5.	13.	57,16	M
	(o) B. v. 399.	47,5	1,3	15,5	29,1	42,5	55,3	5.	17.	9,2	16.	28,63	29,26			5.	17.	5,09	M
	(o) B. v. 623.	42,2	55,5	8,9	22,6	....	49,6	5.	25.	3,2	24.	22,61	23,23			5.	24.	59,06	M
	(p) α Orionis	31,4	44,9	59,0	12,1	25,7	39,1	5.	46.	52,9	46.	12,16	12,77	36,04					M
	(n) Sirius.	2,7	16,8	30,5	44,4	58,8	12,6	6.	38.	26,9	37.	44,67	45,44	35,68					M
Mar. 4	(q) Aldebaran	44,3	58,1	12,1	26,0	40,8	53,9	4.	27.	8,5	26.	26,24	26,78	36,75	0,76	4.	27.	3,35	M
	B. v. 324.	39,3	52,9	6,5	20,1	33,8	47,0	5.	13.	59,9	13.	19,93	20,55			5.	13.	57,15	M
	(r) β Tauri .....	....	....	39,5	54,9	10,5	25,5	5.	16.	40,6	15.	54,88	55,31	36,56		5.	16.	31,91	M

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 0",31. LEVEL Error = + 0",72. From Feb. 17 = + 1",22. From Feb. 21 = + 0",91. From Feb. 28 = + 0",60. AZIMUTH Error = + 10",87. From Feb. 14 = + 12",04. From Feb. 21 = + 9",89. From Feb. 28 = + 11",28.

Feb. 20, 2^h. Hardy was put forward 1^m: several seconds were lost in putting forward the minute hand.

(a) Through thin cloud: very faint. (b) Cloudy. (c) Haze. (d) Obscured at wire V by mist on eye-glass. (e) Disturbed.
 (f) Hurriedly, the lamp requiring attention. (g) Indefinite. (h) The shutter difficult to open. (i) Great motion. (k) 'Bad.' (l) The lamp failed. The observation has been diminished 1". (m) Hurried. (n) Misty. (o) Very faint: too much day-light. (p) Flashing.
 (q) Too flaring to admit of accuracy. (r) Faint at times from cloud: 1" has been deducted.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Mar. 4	(a) * N.P.D. 83° 33'.	10,4	23,6	37,2	50,5	4,3	17,5	5. 26. 31,2	25. 50,68	51,30		0,76	5. 26. 27,90	M
	(b) 15 Geminorum....	14,4	28,8	42,9	57,5	12,3	26,5	6. 18. 40,5	17. 57,56	58,07			6. 18. 34,70	M
	δ Ursæ Minoris SP.	....	....	....	....	5,4	54,3	6. 32. 37,6	21. 19,06	26,27				M
	Sirius.....	1,7	15,9	30,0	43,6	57,9	11,8	6. 38. 25,9	37. 43,83	44,60	36,50		6. 38. 21,24	M
Mar. 5	Rigel.....	47,9	1,7	15,2	28,9	42,5	55,9	5. 7. 9,3	6. 28,77	29,49	37,44	0,67	5. 7. 6,85	M
	(c) ε Hydræ.....	17,6	31,1	44,9	58,2	12,1	25,8	8. 38.	37. 58,41	59,03	37,46		8. 38. 36,49	M
	(d) α Hydræ.....	41,9	55,6	9,1	22,9	....	....	9. 20. 3,5	19. 22,78	23,48	37,39		9. 20. 0,96	M
Mar. 6	(e) α Arietis.....	6,2	20,4	34,9	49,1	4,3	18,5	1. 58. 33,2	57. 49,52	50,01	37,65	0,58	1. 58. 27,88	M
	(f) Aldebaran.....	42,9	57,0	11,1	24,9	39,1	53,0	4. 27. 7,0	26. 25,00	25,55	37,95		4. 27. 3,48	M
	(g) Castor. sp.....	18,7	34,1	49,5	6,0	21,9	38,1	7. 24. 53,9	24. 6,03	6,42	37,99		7. 24. 44,42	M
	(f) Procyon.....	53,9	7,4	21,0	34,5	48,3	1,9	7. 31. 15,4	30. 34,63	35,26	38,18		7. 31. 13,26	M
	(f) Pollux.....	27,8	42,9	58,0	13,7	29,0	44,1	7. 35. 59,5	35. 13,58	14,02	38,01		7. 35. 52,02	M
Mar. 7	(e) Aldebaran.....	42,5	56,4	10,3	24,1	37,9	52,1	4. 27. 6,8	26. 24,30	24,85	38,63	0,62		M
	B. v. 324.....	37,1	51,0	4,5	18,1	31,9	45,1	5. 13. 58,5	13. 18,03	18,65			5. 13. 57,30	M
	* N.P.D. 83° 21'.	45,1	59,0	12,1	25,9	40,0	53,1	5. 27. 6,9	26. 26,02	26,64			5. 27. 5,30	M
	(a) B. v. 925.....	....	34,2	48,4	1,9	15,5	29,4	5. 35. 43,1	35. 1,96	2,58			5. 35. 41,24	M
Mar. 8	* N.P.D. 83° 33'.	7,8	21,5	35,4	48,7	1,9	15,6	5. 26. 28,9	25. 48,55	48,99		0,44	5. 26. 28,07	M
	(a) B. v. 925.....	20,5	34,3	47,9	1,8	15,2	29,0	5. 35. 43,2	35. 1,71	2,15			5. 35. 41,23	M
	(g) α Orionis.....	28,4	42,1	55,1	9,2	22,5	36,6	5. 46. 50,1	46. 9,15	9,58	39,14		5. 46. 48,67	M
	Castor. sp.....	16,9	33,3	49,1	5,1	21,0	36,9	7. 24. 52,8	24. 5,01	5,20	39,17		7. 24. 44,32	M
	(h) Procyon.....	53,3	6,9	20,1	33,9	47,1	....	7. 31. 14,2	30. 33,76	34,21	39,21		7. 31. 13,33	M
	Pollux.....	26,8	42,1	57,0	12,6	28,1	43,0	7. 35. 58,9	35. 12,65	12,89	39,11		7. 35. 52,01	M
	(i) H. C. 17526.....	11,8	30,1	49,1	8,1	26,9	45,9	8. 46. 4,6	45. 8,07	8,12			8. 45. 47,26	M
	(k) Σ 1348.....	0,9	14,1	27,8	41,6	55,1	8,9	9. 16. 22,0	15. 41,49	41,93			9. 16. 21,08	M
	α Hydræ.....	40,6	53,9	7,3	21,1	34,9	48,2	9. 20. 1,9	19. 21,14	21,71	39,14		9. 20. 0,86	M
	(l) Σ 205.....	17,1	35,0	53,1	11,3	29,4	47,1	9. 33. 5,2	32. 11,18	11,23			9. 32. 50,38	M
	φ Ursæ Majoris...	45,8	9,1	32,5	56,1	19,1	42,7	9. 42. 5,9	40. 55,89	55,68			9. 41. 34,84	M
	(m) Σ 1397.....	35,1	50,3	5,1	20,0	35,1	49,9	9. 48. 5,0	47. 20,08	20,34			9. 47. 59,50	M
	Σ 210.....	11,9	32,1	51,5	11,7	31,9	51,1	9. 53. 10,9	52. 11,59	11,55			9. 52. 50,71	M
	Σ 213.....	59,8	15,2	30,1	45,7	1,0	16,1	10. 4. 31,2	3. 45,59	45,83			10. 4. 24,99	M
	(n) Σ 217.....	10,6	25,3	39,1	53,6	7,9	22,0	10. 18. 35,9	17. 53,49	53,83			10. 18. 33,00	M
	(a) Σ 1445.....	30,2	44,1	57,1	10,7	24,2	37,9	10. 24. 51,5	24. 10,82	11,33			10. 24. 50,50	M
	B.A.C. 3649.....	17,1	30,2	44,0	58,1	11,6	25,4	10. 31. 39,0	30. 57,92	58,34			10. 31. 37,51	M
	Σ 1470.....	5,6	19,1	32,2	46,0	59,9	13,1	10. 38. 26,6	37. 46,07	46,62			10. 38. 25,79	M
	Piazzi X. 179.	47,8	1,7	15,0	28,9	42,1	55,9	10. 44. 9,1	43. 28,65	29,08			10. 44. 8,26	M
	Σ 1496. sf.....	49,9	4,0	17,7	31,9	45,5	59,6	10. 50. 13,2	49. 31,69	32,08			10. 50. 11,26	M
	(o) δ Leonis.....	31,8	45,9	59,9	15,0	29,3	44,0	11. 5. 58,1	5. 14,87	15,18	39,03		11. 5. 54,36	M
Mar. 11	(p) α Leporis.....	31,6	45,9	59,7	14,1	28,2	42,0	5. 25. 56,8	25. 14,05	13,92		0,78	5. 25. 55,12	M
	(q) α Orionis.....	27,1	40,5	53,9	7,6	21,1	34,4	5. 46. 47,9	46. 7,50	7,35	41,32		5. 46. 48,56	M
	ε Hydræ.....	14,6	28,1	41,7	55,1	8,7	22,6	8. 38. 36,0	37. 55,26	55,11	41,33		8. 38. 36,41	M
	(r) H. C. 17526.....	9,2	28,1	47,0	6,1	24,6	43,4	8. 46. 1,9	45. 5,76	5,62			8. 45. 46,93	M
	(s) α Hydræ.....	38,9	52,6	6,0	19,9	33,4	46,9	9. 20. 0,8	19. 19,79	19,65	41,19		9. 20. 0,97	M
	(t) Σ 1404.....	3,6	17,2	31,1	44,6	58,2	11,6	9. 56. 24,8	55. 44,44	44,30			9. 56. 25,64	M
	Σ 213.....	57,9	13,3	28,1	44,0	59,2	14,1	10. 4. 29,8	3. 43,78	43,64			10. 4. 24,99	M
	B.A.C. 3529.....	6,9	19,9	33,1	47,0	0,4	13,9	10. 12. 27,1	11. 46,90	46,75			10. 12. 28,10	M
	(u) Σ 217.....	9,1	23,0	37,2	51,0	5,4	20,1	10. 18.	17. 51,38	51,23			10. 18. 32,59	M
Mar. 12	(x) B.A.C. 2038.....	35,7	49,4	3,9	18,6	32,9	47,0	6. 12. 1,9	11. 18,49	18,34		0,80	6. 12. 0,41	M
	(p) δ Ursæ Minoris SP.	....	49,5	35,7	....	4,8	....	6. 32. 40,6	21. 20,56	21,33				M
	51 (Hev.) Cephei.	....	....	52,4	37,8	22,4	1,9	6. 39. 44,5	25. 37,81	36,71				M
	(y) Sirius.....	56,9	10,8	25,0	39,2	53,1	7,0	6. 38. 21,4	37. 39,06	38,94	42,02		6. 38. 21,02	M
	(z) Castor. sp.....	14,7	30,8	46,1	2,0	18,4	34,2	7. 24. 50,1	24. 2,34	2,20	42,11		7. 24. 44,31	M
	(z) Procyon.....	50,9	4,4	17,9	31,7	44,9	58,6	7. 31. 12,1	30. 31,51	31,36	42,00		7. 31. 13,47	M
Mar. 13	Pollux.....	23,9	39,1	54,0	10,1	25,6	40,2	7. 35. 55,7	35. 9,81	9,67	42,27		7. 35. 51,78	M
	(aa) α Orionis.....	25,7	39,2	52,8	6,9	20,3	33,4	5. 46. 47,1	46. 6,49	6,39	42,24	0,20	5. 46. 48,65	M

ILLUMINATED END OF AXIS EAST. From March 8, WEST. COLLIMATION Error = + 0",31. From March 8 = - 0",74. LEVEL Error = + 0",60. From March 6 = + 0",70. From March 8 = - 0",46. AZIMUTH Error = + 11",28. From March 11 = - 0",97. (The screws were turned to diminish the Azimuth Error.) From March 13 = - 0",06.
 March 7, 22^h. The Transit was reversed, and the Error of Collimation determined.

(a) Very faint. (b) Faint from cloud. (c) Cloudy. (d) Through thick haze. The Temperature at this time was 14° 7'. (e) Unsteadiness. (f) Field badly illuminated. (g) Flashing. (h) The instrument was accidentally moved after wire V. (i) A smaller near this. (k) The components quite close. (l) A star of greater N.P.D. precedes. (m) Another south-follows. (n) Another of nearly the same N.P.D. precedes. (o) Much ray. (p) Great motion. (q) Wire IV was written down confusedly 7,9 and altered immediately after. (r) A star of Mag. 10 preceded. (s) Indefinite. (t) Faint: appeared double. (u) Very faint: obscured at times by cloud. (x) A smaller south-precedes. (y) Radiating. (z) Haze. (aa) Difficult to observe; much motion and haze. Great change of clock-rate between March 12 and March 13: the Temperature fell 10°.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Mar. 13	(a) B.A.C. 2038.....	34,6	48,9	3,1	18,0	32,0	46,8	6. 12. 1,3			11. 17,82		17,72		0,20	6. 11. 59,98			M
	(b) ϵ Hydræ.....	13,8	27,1	40,6	54,1	7,5	21,1	8. 38. 34,5			37. 54,10		54,00	42,42		8. 38. 36,28			M
	(b) α Hydræ.....	37,9	51,6	4,7	18,9	32,5	45,8	9. 19. 59,0			19. 18,63		18,55	42,27		9. 20. 0,84			M
	(a) Σ_2 205.....	13,9	31,8	49,9	8,1	26,5	44,1	9. 33. 1,9			32. 8,03		7,90			9. 32. 50,19			M
	(c) ϕ Ursæ Majoris...	42,7	5,6	28,8	52,5	16,0	38,9	9. 42. 2,7			40. 52,46		52,31			9. 41. 34,60			M
	(d) Σ 1397.....	32,1	46,9	1,8	17,2	32,1	46,9	9. 48. 2,0			47. 17,00		16,89			9. 47. 59,18			M
	Σ_2 210.....	8,9	28,9	48,2	8,5	28,4	48,0	9. 53. 7,5			52. 8,34		8,20			9. 52. 50,49			M
	(e) Regulus.....	45,9	59,8	13,7	27,6	41,3	54,8	10. 0. 8,7			59. 27,40		27,30	42,20		10. 0. 9,59			M
	Σ_2 213.....	56,9	12,4	27,0	42,9	58,0	13,4	10. 4. 28,1			3. 42,68		42,57			10. 4. 24,86			M
Mar. 14	(a) Polaris M.....	23,4	9,6	52,8	32,9	15,7	59,8	1. 4. 43,5			2. 31,42		28,15		0,55	1. 3. 10,81			M
	Rigel.....	43,1	57,0	10,6	24,1	37,8	51,3	5. 7. 4,9			6. 24,11		24,03	42,73					M
	(f) β Tauri.....	2,9	18,4	33,3	49,0	4,5	19,8	5. 16. 35,1			15. 49,00		48,89	42,78					M
	α Leporis.....	30,1	44,2	58,0	12,8	26,7	40,9	5. 25. 55,0			25. 12,54		12,48			5. 25. 55,24			M
	(g) δ Ursæ Minoris SP.	47,8	32,9			9,8	54,5	6. 32. 42,0			21. 21,24		22,69						M
	(h) δ 51 (Hev.) Cephei.	31,9	15,4	54,1	32,6	21,7	3,2	6. 39. 43,9			25. 37,54		35,61						M
	(i) ϵ Hydræ.....		25,8	39,6	53,5	7,2	20,5	8. 38. 34,0			37. 53,31		53,21	43,20					M
Mar. 17	α Hydræ.....	36,1	49,9	3,4	17,0	30,7	44,2	9. 19. 57,8			19. 17,02		16,80	43,98	0,39	9. 20. 0,81			M
	Σ_2 205.....	12,8	30,4	48,1	6,7	24,8	42,9	9. 33. 0,6			32. 6,62		6,42			9. 32. 50,43			M
	ϕ Ursæ Majoris ..	40,8	4,0	26,9	50,9	14,2	37,6	9. 42. 0,9			40. 50,76		50,58			9. 41. 34,60			M
	(k) Σ 1397.....	30,8	45,6	0,5	15,9	30,5	45,7	9. 48. 0,4			47. 15,63		15,42			9. 47. 59,44			M
	Σ_2 210.....	7,7	27,4	47,0	7,1	26,9	46,2	9. 53. 6,4			52. 6,96		6,78			9. 52. 50,80			M
	Regulus.....	43,9	58,1	11,6	25,4	39,5	53,1	10. 0. 6,9			59. 25,50		25,27	44,21		10. 0. 9,29			M
	Σ_2 213.....	55,2	10,6	25,9	41,2	56,7	12,0	10. 4. 27,1			3. 41,25		41,04			10. 4. 25,06			M
	B.A.C. 3506.....	25,7	39,8	53,5	8,0	22,1	35,9	10. 7. 50,0			7. 7,86		7,64			10. 7. 51,66			M
	γ Leonis.....	1,1	15,7	29,3	44,2	58,1	13,0	10. 11. 27,4			10. 44,12		43,90			10. 11. 27,93			M
	δ Leonis.....	26,9	41,6	55,9	10,7	25,1	39,2	11. 5. 53,8			5. 10,46		10,24	43,99		11. 5. 54,28			M
	ϵ Leonis.....	2,6	15,7	29,3	43,0	56,2	9,9	11. 22. 23,1			21. 42,84		42,60			11. 22. 26,64			M
	(l) Σ 1558.....	10,9	26,0	40,1	54,6	9,3	23,7	11. 28. 38,3			27. 54,70		54,48			11. 28. 38,53			M
	(m) B. xi. 687.....	28,5	42,2	55,1	8,6	23,0	36,2	11. 38. 49,6			38. 9,03		8,79			11. 38. 52,84			M
	β Leonis.....			13,9	28,0	42,1	55,8	11. 41. 9,6			40. 27,91		27,69	44,11		11. 41. 11,74			M
	(n) Σ 1582.....	37,6	52,1	6,3	21,5	36,1	50,7	11. 48. 5,2			47. 21,36		21,15			11. 48. 5,20			M
	Σ 1606.....	22,8	40,1	57,9	16,1	33,8	51,6	12. 3. 9,1			2. 15,92		15,73			12. 2. 59,78			M
	Σ 1619. sf.....	49,9	4,0	17,1	31,0	44,2	57,9	12. 7. 11,4			6. 30,79		30,56			12. 7. 14,62			M
	(o) Σ 1634.....	27,5	42,8	57,5	12,4	26,5	41,9	12. 12. 56,5			12. 12,16		11,95			12. 12. 56,01			M
	(p) β Corvi.....	50,9	5,7	20,0	34,7	49,5	3,8	12. 26. 18,3			25. 34,70		34,47	43,91		12. 26. 18,53			M
Mar. 19	(q) B. xi. 687.....	27,8	41,2	55,0	8,7	22,4	35,5	11. 38. 49,4			38. 8,57		8,33		0,56	11. 38. 53,27			M
	(r) β Leonis.....		58,9	13,2	27,0	40,9	55,3	11. 41. 9,1			40. 27,09		26,87	44,94					M
Mar. 20	(s) Polaris.....				27,4	54,8	24,9	1. 19.			2. 24,02		23,77		0,70	1. 3. 9,03			M
	Polaris M.....	16,0	3,7	43,5	27,4	7,9	52,8	1. 4. 37,4			2. 24,42		24,17			1. 3. 9,43			M
	β Tauri.....	0,6	15,8	30,9	46,1	1,9	17,0	5. 16. 32,3			15. 46,37		46,16	45,39		5. 16. 31,54			M
	(t) Sirius.....	53,8	7,9	21,6	35,8	49,9	3,7	6. 38. 17,9			37. 35,80		35,57	45,24		6. 38. 20,99			M
	Σ 3121.....	11,8	27,1	42,5	58,0	13,7	28,9	9. 8. 44,0			7. 58,00		57,80			9. 8. 43,30			M
	Σ_2 201.....	18,4	33,6	48,8	4,0	19,8	34,7	9. 14. 50,1			14. 4,21		4,01			9. 14. 49,51			M
	ω Leonis.....	45,2	59,0	12,9	26,3	40,1	53,9	9. 20. 7,2			19. 26,37		26,14			9. 20. 11,64			M
	Regulus.....	42,9	56,7	10,2	24,0	37,9	51,7	10. 0. 5,6			59. 24,14		23,91	45,55		10. 0. 9,43			M
	B.A.C. 3506.....	23,9	38,2	52,0	6,3	20,9	35,1	10. 7. 49,1			7. 6,50		6,28			10. 7. 51,80			M
	γ Leonis.....	59,5	13,9	28,1	42,8	56,9	11,5	10. 11. 25,9			10. 42,66		42,44			10. 11. 27,97			M
	Σ 1521.....	32,9	48,6	3,8	19,5	34,9	50,1	11. 7. 4,9			6. 19,25		19,04			11. 7. 4,59			M
	Σ 1534.....	16,3	30,9	44,9	59,6	13,8	27,9	11. 13. 42,0			12. 59,35		59,13			11. 13. 44,69			M
	δ Leonis.....				7,9	21,8	35,0	11. 15. 48,9			15. 7,76		7,53			11. 15. 53,09			M
	(u) Σ_2 234.....	48,9	7,0	24,8	43,1	1,8	19,6	11. 22. 37,9			21. 43,31		43,11			11. 22. 28,67			M
	(x) Σ 1558.....	8,9	24,1	38,6	53,2	7,8	22,0	11. 28. 36,5			27. 53,02		52,80			11. 28. 38,37			M
	B. xi. 687.....	26,9	40,8	53,7	8,0	21,5	34,9	11. 38. 48,1			38. 7,70		7,46			11. 38. 53,03			M
	Σ 1619. f.....	48,4	2,2	15,7	29,0	42,8	55,9	12. 7. 9,8			6. 29,12		28,89			12. 7. 14,47			M
	(y) H. C. 23136.....	49,3	4,5	18,9	34,5	49,2	4,0	12. 13. 19,2			12. 34,24		34,03			12. 13. 19,62			M
	B.A.C. 4218.....	17,6	31,0	44,9	58,7	12,1	26,0	12. 22. 39,9			21. 58,60		58,37			12. 22. 43,96			M
	β Corvi.....			18,1	32,9	47,7	2,4	12. 26. 16,9			25. 33,02		32,79	45,62		12. 26. 18,38			M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = $-0''.74$. LEVEL Error = $-0''.46$. From March 17 = $-0''.74$. AZIMUTH Error = $-0''.06$. From March 17 = $-2''.48$.

(a) Great motion. (b) Haze. (c) The star appeared to jump. (d) Faint. (e) Thick haze. Temp $23^{\circ}.2$. (f) The noted times were 1^s greater. (g) Very steady. (h) Wire IV doubtful, being taken hurriedly. (i) Cloudy at intervals. This observation, being discordant, is not used for clock error. (k) Very faint star. (l) The following of two of nearly the same N.P.D. Very faint. (m) Faint from Moon-light. (n) Has a small companion. Its R.A. is the same as that of Σ 1584. (o) Taken hurriedly. (p) Faint from thick haze. (q) Very faint, partly from cloud. (r) Harried. Wire I, which was written down 46,0, is rejected. (s) Clouds and unsteadiness. (t) Very bright. (u) Preceded by three small stars. (x) Very faint. The following and brighter of two. (y) Another south-follows. The R.A. of Lalande is 1^s greater.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Mar. 20	(a) Polaris SP.	48,5	18,8	46,6	24,6	54,9	29,5	13.	28.	0,0	2.	23,27	23,21		0,70	13.	3.	8,82	M
	Polaris SP. M.	12,2	59,8	40,8	24,6	3,7	46,9	13.	4.	28,2	2.	24,85	24,79			13.	3.	10,40	M
	(b) Arcturus.	9,8	24,0	38,1	52,2	7,0	21,1	14.	8.	35,8	7.	52,58	52,37	45,74		14.	8.	38,01	M
Mar. 21	(c) Polaris.	54,5	27,4	51,6	27,7	53,8	24,7	1.	19.	....	2.	25,40	25,15			1.	3.	11,11	M
	Polaris M.	15,9	59,6	43,6	27,7	8,4	51,5	1.	4.	33,1	2.	23,15	22,90			1.	3.	8,86	M
Mar. 24	(d) α Orionis.	18,6	32,1	45,8	59,9	13,0	26,7	5.	46.	40,1	45.	59,46	59,24	49,20	1,22	5.	46.	48,67	M
	δ Ursæ Minoris SP.	3,5	48,7	32,6	20,6	....	53,4	6.	32.	39,7	21.	21,21	22,15						M
	51 (Hev.) Cephei.	0,8	40,4	....	....	....	49,6	6.	39.	31,6	25.	25,03	26,00						M
	(e) Sirius.	49,2	3,7	17,1	31,8	45,2	59,3	6.	38.	13,1	37.	31,35	31,10	49,63		6.	38.	20,58	M
	Procyon.	43,1	56,9	10,1	23,9	37,6	51,0	7.	31.	4,3	30.	23,84	23,61	49,56		7.	31.	13,13	M
	Pollux.	16,4	31,8	46,9	2,3	17,7	32,9	7.	35.	48,1	35.	2,31	2,14	49,58		7.	35.	51,67	M
	(f) Σ 1332.	50,9	5,7	20,0	35,4	49,9	5,0	9.	8.	19,7	7.	35,23	35,05			9.	8.	24,65	M
	Σ 201.	13,9	29,1	44,5	0,1	15,0	30,6	9.	14.	45,8	13.	59,86	59,60			9.	14.	49,30	M
	(g) ω Leonis.	41,1	54,9	8,5	21,8	35,5	49,2	9.	20.	3,0	19.	22,01	21,79			9.	20.	11,40	M
	(h) Σ 1404.	55,5	9,2	22,8	36,4	50,0	3,5	9.	56.	16,8	55.	36,32	36,09			9.	56.	25,73	M
	Regulus.	38,9	52,3	5,8	20,0	33,9	47,7	10.	0.	1,5	59.	20,02	19,81	49,62		10.	0.	9,46	M
	B.A.C. 3506.	19,9	34,0	47,8	2,5	16,9	30,9	10.	7.	44,8	7.	2,41	2,21			10.	7.	51,86	M
	γ Leonis.	55,3	9,8	24,1	38,2	52,9	7,1	10.	11.	21,9	10.	38,47	38,28			10.	11.	27,94	M
Mar. 26	(i) Polaris M. ....	....	....	34,9	19,4	0,8	43,6	1.	4.	29,4	2.	15,45	18,33		1,21				M
	(k) Regulus.	36,2	50,1	3,9	17,8	31,6	45,0	9.	59.	59,1	59.	17,67	17,43	51,98					M
Mar. 27	(l) Castor. sp.	3,8	19,1	35,1	51,4	7,5	23,2	7.	24.	39,0	23.	51,31	51,01	53,01	1,04				M
	Procyon.	40,0	53,1	6,9	20,7	33,9	47,2	7.	31.	1,4	30.	20,46	20,13	52,98					M
	(m) Pollux.	12,8	27,5	43,3	59,0	14,1	29,4	7.	35.	44,9	34.	58,72	58,42						M
Mar. 28	(n) Polaris.	38,7	9,9	....	13,5	....	10,4	1.	27.	44,8	2.	10,81	10,57		1,06	1.	3.	4,21	M
	(o) α Orionis.	14,1	27,9	41,0	54,9	8,7	22,0	5.	46.	35,6	45.	54,89	54,56	53,81		5.	46.	48,42	M
	α Hydræ.	26,4	39,9	53,3	7,0	20,7	34,1	9.	19.	47,9	19.	7,04	6,72	53,95		9.	20.	0,73	M
	2 Sextantis.	50,1	3,9	17,1	31,0	44,8	57,9	9.	30.	11,6	29.	30,92	30,60			9.	30.	24,62	M
	(p) H. C. 19371.	48,9	2,8	16,5	30,4	44,9	....	9.	45.	13,0	44.	30,74	30,42			9.	45.	24,45	M
	(q) Σ 1404.	51,5	4,9	18,2	32,0	44,9	58,8	9.	56.	11,5	55.	31,69	31,36			9.	56.	25,40	M
	Regulus.	34,2	48,1	1,4	15,8	29,6	43,1	9.	59.	56,9	59.	15,59	15,26	54,14		10.	0.	9,30	M
	B.A.C. 3529.	53,8	7,3	20,9	34,1	47,9	1,7	10.	12.	14,9	11.	34,37	34,03			10.	12.	28,08	M
	(r) Σ 217.	56,9	10,9	25,0	39,1	53,2	7,4	10.	18.	21,5	17.	39,15	38,83			10.	18.	32,88	M
	(q) Σ 1445.	15,7	....	43,5	56,9	10,1	23,9	10.	24.	37,2	23.	56,74	56,41			10.	24.	50,47	M
	B.A.C. 3649.	3,1	16,8	30,0	43,9	57,7	11,3	10.	31.	24,9	30.	43,96	43,63			10.	31.	37,69	M
	Σ 1465. ....	....	....	54,7	14,2	33,3	52,1	10.	34.	11,9	33.	14,07	13,79			10.	34.	7,86	M
	(s) Σ 1470.	51,8	4,9	18,4	32,1	45,9	59,2	10.	38.	12,4	37.	32,11	31,77			10.	38.	25,84	M
	Piazzi X. 179. sf.	33,7	47,3	0,4	14,8	28,0	41,5	10.	43.	55,2	43.	14,41	14,08			10.	43.	8,15	M
	(t) Σ 1496. ....	....	49,5	3,8	17,7	31,5	45,3	10.	49.	59,2	49.	17,55	17,22			10.	50.	11,30	M
	p ^h Leonis.	18,0	31,9	44,9	58,8	12,1	25,7	11.	5.	38,9	4.	58,62	58,29			11.	5.	52,38	M
	n Leonis. ....	....	....	40,1	54,2	8,4	21,9	11.	7.	35,3	6.	54,10	53,77			11.	7.	47,86	M
	(u) Piazzi XI. 27. ....	....	....	....	2,7	21,0	39,7	11.	9.	58,1	9.	2,63	2,33			11.	9.	56,42	M
	Σ 1619. sf.	40,5	53,8	7,1	21,0	34,5	48,1	12.	7.	1,6	6.	20,95	20,62			12.	7.	14,75	M
	(x) H. C. 23136.	40,9	56,1	11,1	26,0	41,1	56,0	12.	13.	10,9	12.	26,02	25,71			12.	13.	19,85	M
	B.A.C. 4218.	9,7	22,9	36,6	50,5	4,1	17,8	12.	22.	31,5	21.	50,45	50,12			12.	22.	44,27	M
	β Corvi.	40,8	55,1	10,1	24,9	39,2	53,9	12.	26.	8,5	25.	24,64	24,30	54,16		12.	26.	18,45	M
	(y) Polaris SP.	37,8	12,4	43,9	16,5	39,6	8,5	13.	27.	37,4	2.	10,87	10,60			13.	3.	4,77	M
	Spica.	30,2	43,9	57,5	11,2	24,9	38,6	13.	16.	51,9	16.	11,18	10,85	54,20		13.	17.	5,04	M
Mar. 29	(z) Polaris.	36,9	13,5	....	....	....	....	1.	45.	....	2.	10,88	10,64		1,16	1.	3.	5,42	M
	Aldebaran.	26,7	40,8	54,2	8,9	22,7	36,8	4.	26.	50,5	26.	8,66	8,34	54,78		4.	27.	3,28	M
	β Tauri.	50,9	6,1	21,4	36,9	52,1	7,4	5.	16.	22,8	15.	36,80	36,50	54,88		5.	16.	31,49	M
	(aa) α Hydræ.	24,5	38,6	51,9	5,5	19,3	33,1	9.	19.	46,6	19.	5,64	5,32	55,34		9.	20.	0,50	M
	(bb) B. ix. 929.	50,5	4,6	18,8	32,9	47,0	1,5	9.	42.	15,4	41.	32,96	32,64			9.	42.	27,84	M
Mar. 31	(cc) Regulus.	33,1	46,9	0,1	14,4	28,3	42,0	9.	59.	55,9	59.	14,40	14,07	55,32		10.	0.	9,28	M
	α Orionis.	10,8	24,2	37,8	51,6	5,0	18,5	5.	46.	32,1	45.	51,44	51,14	57,18	1,06	5.	46.	48,31	M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = - 0",74. LEVEL Error = - 0",74. From March 24 = - 0",07. From Mar. 27 = - 1",61. AZIMUTH Error = - 2",48. From Mar. 24 = - 3",00. From Mar. 26 = - 3",67. From Mar. 31 = - 2",94.

(a) Radiating, with much motion. (b) Flashing. (c) Haze. (d) Hurried. Great rise of Temperature between the 21st and 24th. The clock's rate seems affected. (e) Hurried. (f) The companion is fainter. (g) The last four wires very uncertain on account of clouds. (h) At times scarcely visible for cloud. (i) Little better than guess, so cloudy. (k) Faint from cloud, and wind high. (l) Very loud wind. (m) Too clouded to bear illumination. This observation is not used for clock-error. (n) Last wire quite doubtful, clouds passing. (o) Great motion, and wind high. (p) At times hid by clouds. (q) Extremely faint. (r) The brighter of two. (s) A star of about mag. 10 preceded this. (t) Disturbance: 1^m has been deducted. (u) Two smaller preceded. (x) 'A star of the same mag. south-following.' See March 6, 1844. (y) Great deal of ray. (z) Clouded at the other wires. (aa) Faint from cloud. (bb) Wire 1 was written down 49,5. (cc) Nearly hid by cloud.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Mar. 31	(a) Sirius	41,7	55,8	9,5	23,9	37,8	51,7	6	38	5,9	37	23,77	23,49	57,10	1,06	6	38	20,69	M
	Regulus.....	30,9	44,8	58,0	12,6	25,9	40,0	9	59	53,6	59	12,27	11,97	57,40		10	0	9,32	M
	B.A.C. 3529.....	50,1	3,9	17,3	31,0	44,4	58,1	10	12	11,7	11	30,94	30,64			10	12	28,00	M
	(b) Σ_2 218.....	54,1	8,3	21,5	34,9	48,4	2,3	10	19	15,7	18	35,03	34,74			10	19	32,11	M
	(c) Σ 1470.....			14,7	28,1	42,4	55,8	10	38	9,1	37	28,51	28,21			10	38	25,59	M
	(d) Piazzi X. 179. sf..	30,4	43,9	57,1	11,5	24,6	37,9	10	43	51,9	43	11,05	10,75			10	44	8,13	M
	Σ 1496	31,9	46,3	0,4	14,1	27,9	42,0	10	49	55,5	49	14,01	13,71			10	50	11,10	M
	Σ 1506	15,9	29,6	42,8	56,5	9,8	23,1	10	56	36,8	55	56,36	56,07			10	56	53,46	M
	(e) Σ_2 231.....	51,8	7,5	22,9	39,0	54,7	10,4	11	2	26,2	1	38,93	38,65			11	2	36,05	M
	δ Leonis.....		28,5	42,3	57,1	11,7	25,9	11	5	40,0	4	57,03	56,74	57,46		11	5	54,14	M
	Piazzi XI. 27.....	3,9	22,7	40,8	59,2	17,8	36,3	11	9	54,4	8	59,30	59,02			11	9	56,42	M
	Σ_2 234.....	36,8	55,1	12,9	31,6	49,8	7,9	11	22	25,9	21	31,43	31,15			11	22	28,56	M
	(f) Σ 1558.....	57,6	12,4	26,9	41,5	55,6	10,2	11	28	24,5	27	41,25	40,96			11	28	38,38	M
	(g) β Leonis.....	32,9	46,8	0,6	14,8	28,5	42,8	11	40	56,6	40	14,71	14,42	57,41		11	41	11,85	M
	Piazzi XI. 181 ..	39,4	0,0	20,9	42,0	2,8	23,6	11	46	44,4	45	41,88	41,61			11	46	39,04	M
Apr. 1	(h) Polaris M.....	51,6	37,8	35,2	8,7	52,9	37,5	1	4	22,4	2	6,90	5,57		1,04	1	3	3,57	M
	(i) Polaris SP.....	40,8	13,0	36,7	3,7	36,3	58,9	1	27	29,6	2	5,57	6,47			1	3	4,47	M
	(k) Spica.....	25,8	39,7	52,9	7,0	20,6	34,1	13	16	47,8	16	6,84	6,55	58,54					M
Apr. 2	(h) Polaris.....	39,5	9,4	32,7	10,8	....	9,6	1	27	38,9	2	8,71	7,38		1,05	1	3	6,42	M
	α Orionis.....	8,7	22,1	35,7	49,0	3,1	16,4	5	46	29,9	45	49,27	48,97	59,31		5	46	48,22	M
	Castor. sp.....	56,9	13,4	29,1	45,0	1,0	16,9	7	24	32,8	23	45,01	44,73	59,17		7	24	44,05	M
	Procyon.....	33,2	46,9	0,4	14,0	27,5	40,9	7	30	54,7	30	13,94	13,65	59,36		7	31	12,98	M
	Pollux.....	6,4	21,9	36,8	52,7	7,6	22,9	7	35	38,2	34	52,36	52,08	59,47		7	35	51,41	M
	Piazzi VIII. 70 ..	46,7	0,1	13,6	27,3	41,1	54,8	8	18	8,4	17	27,43	27,13			8	18	26,49	M
	B. VIII. 644	57,5	11,8	24,9	39,0	52,6	6,4	8	24	20,0	23	38,89	38,60			8	24	37,97	M
	(l) * N.P.D. 76°. 32'	10,1	23,9	37,7	52,0	5,6	19,9	8	29	33,3	28	51,79	51,49			8	29	50,86	M
	H. C. 17139	30,8	44,9	58,8	13,2	27,4	40,8	8	33	55,3	33	13,04	12,75			8	34	12,13	M
	(e) H. C. 19371	43,6	57,4	11,1	25,6	39,2	53,5	9	45	7,4	44	25,40	25,11			9	45	24,53	M
	(m) Regulus	28,9	42,5	56,1	10,2	24,0	37,7	9	59	51,5	59	10,13	9,83	59,52		10	0	9,27	M
	Σ_2 218.....	52,2	5,6	18,9	33,0	46,6	0,3	10	19	13,6	18	32,89	32,60			10	19	32,05	M
	Piazzi XI. 27.....	1,9	20,4	38,5	56,9	15,8	33,9	11	9	52,2	8	57,09	56,81			11	9	56,30	M
	β Leonis.....	30,8	44,7	58,6	12,9	26,8	40,6	11	40	54,4	40	12,69	12,40	59,43		11	41	11,91	M
	Piazzi XI. 181.....	37,3	58,2	18,9	39,8	0,7	21,6	11	46	42,4	45	39,85	39,58			11	46	39,10	M
	* N.P.D. 39°. 33'	27,6	49,4	10,1	31,8	52,4	13,9	11	52	34,9	51	31,45	31,18			11	52	30,70	M
	Σ 3078.....	44,5	58,2	11,9	25,7	39,3	53,1	12	1	6,9	0	25,66	25,37			12	1	24,89	M
	(n) H. C. 23132.....	56,9	11,8	26,6	41,9	55,9	11,7	12	13	26,4	12	41,61	41,32			12	13	40,85	M
	B.A.C. 4218.....	4,0	17,5	31,1	44,9	58,6	12,4	12	22	25,9	21	44,91	44,62			12	22	44,16	M
	(o) β Corvi.....	35,5	50,1	4,6	19,1	34,2	48,1	12	26	3,6	25	19,32	19,04	59,44		12	26	18,58	M
	Σ 1678.....	1,9	15,8	29,9	44,0	57,8	11,7	12	37	26,0	36	43,88	43,59			12	37	43,14	M
	(p) 35 Comæ.....	59,8	14,5	28,7	43,1	57,9	12,1	12	45	26,8	44	43,28	42,99			12	45	42,55	M
Apr. 3	Sirius.....	38,1	52,6	6,7	20,8	34,5	48,7	6	38	2,6	37	20,58	20,30	60,23	1,07	6	38	20,65	M
	Regulus	27,7	41,5	55,1	9,0	22,9	36,5	9	59	50,3	59	9,00	8,70	60,64		10	0	9,21	M
	Σ_2 218.....	51,4	4,9	18,1	31,8	45,4	58,8	10	19	12,5	18	31,85	31,56			10	19	32,08	M
	Σ 1445.....	9,9	23,2	36,5	50,8	3,6	17,1	10	24	30,8	23	50,28	49,98			10	24	50,50	M
	B.A.C. 3649.....	56,1	9,9	23,7	37,5	50,9	4,7	10	31	18,1	30	37,27	36,97			10	31	37,50	M
	Σ_2 228.....	10,6	24,5	39,9	54,6	9,0	23,9	10	38	38,4	37	54,42	54,14			10	38	54,67	M
	Σ_2 231.....	48,5	4,3	20,0	35,6	51,7	7,2	11	2	23,5	1	35,83	35,55			11	2	36,10	M
	δ Leonis.....	10,5	25,1	39,3	53,9	8,0	22,8	11	5	37,3	4	53,85	53,56	60,63		11	5	54,12	M
	(q) Piazzi XI. 27.....	0,5	19,4	37,3	56,6	14,8	33,1	11	9	51,3	8	56,14	55,86			11	9	56,42	M
	(r) β Leonis.....	29,6	43,8	57,5	12,2	25,4	39,2	11	40	53,5	40	11,61	11,32	60,50		11	41	11,90	M
	(s) Piazzi XI. 181.....	36,3	56,9	17,8	39,0	59,6	20,5	11	46	41,4	45	38,79	38,52			11	46	39,11	M
	* N.P.D. 39°. 33'	26,9	48,1	9,0	30,4	51,8	12,9	11	52	34,0	51	30,45	30,18			11	52	30,77	M
	(t) H. C. 23136.....	34,8	49,9	4,7	19,8	34,5	49,3	12	13	4,4	12	19,63	19,34			12	13	19,94	M
Apr. 4	(u) Aldebaran	19,9	34,5	47,8	2,4	16,0	30,1	4	26	43,9	26	2,09	1,80	61,23	1,22	4	27	3,13	M
	(u) Rigel.....	24,5	37,9	51,5	5,3	18,9	32,6	5	6	45,9	6	5,23	4,95	61,45		5	7	6,32	M
	(u) β Tauri.....	44,0	59,6	14,8	30,1	45,6	0,9	5	16	16,0	15	30,15	29,87	61,41		5	16	31,25	M
	(d) B. VIII. 228.....	....	....	....	9,3	22,9	36,5	8	8	49,9	8	9,35	9,07			8	9	10,59	M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = - 0",74. LEVEL Error = - 1",61. AZIMUTH Error = - 2",94.

(a) Great motion. (b) Counting found 2* in defect: the four last wires have been increased 2*. (c) Too faint to observe at wires I and II.
 (d) One minute has been deducted. (e) A very faint star precedes. (f) Very faint. A smaller precedes. (g) Flaring. (h) Faint and unsteady.
 (i) Radiating, but steady. Wires I, II, and III by B. (k) Flashing. (l) Very faint. A smaller follows. (m) Appeared misty.
 (n) Mistaken for the star H. C. 23136, which precedes. (o) Haze and great motion. (p) The night was unfavourable for observing.
 (q) Hurriedly. (r) Not good. (s) The first two wires have been increased by 1*: error of counting discovered by looking at the clock. (t) 'An equal follows.' The observer felt fatigued this evening. (u) Unsteadiness.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Apr. 4	(a) H. C. 16341.....	56,2	9,8	23,1	36,9	50,3	3,8	8. 12.	17,1		11. 36,74		36,45		1,22	8. 12.	37,98		M
	21 Cancri.....			13,2	27,0	40,9	54,6	8. 15.	8,0		14. 27,02		26,73			8. 15.	28,26		M
	Piazzi VIII. 70...	43,9	58,0	10,9	25,2	38,8	52,6	8. 18.	5,9		17. 25,04		24,74			8. 18.	26,27		M
	B. VIII. 626.....	7,4	21,1	34,9	49,0	2,8	16,6	8. 23.	30,3		22. 48,88		48,58			8. 23.	50,12		M
Apr. 5	(b) Rigel.....	23,1	36,8	50,1	3,9	17,2	30,9	5. 6.	44,8		6. 3,83		3,54	62,85	1,27	5. 7.	6,29		M
	(b) β Tauri.....	42,9	58,0	12,9	29,0	44,4	59,5	5. 16.	14,6		15. 28,76		28,46	62,80		5. 16.	31,22		M
	Sirius.....	35,9	50,0	3,8	18,1	31,9	46,1	6. 38.	0,5		37. 18,05		17,76	62,73		6. 38.	20,59		M
	B.A.C. 2872.....	27,9	41,6	55,0	9,2	23,2	36,8	8. 24.	50,9		24. 9,23		8,92			8. 25.	11,84		M
	(c) 23 Leonis.....	56,4	10,8	23,9	38,4	52,1	5,9	9. 42.	19,7		41. 38,17		37,86			9. 42.	40,85		M
	(b) H. C. 19371.....	39,8	53,8	7,5	21,9	35,8	50,1	9. 45.	3,9		44. 21,84		21,54			9. 45.	24,53		M
	(d) Regulus.....	25,5	38,9	53,2	6,7	20,1	34,4	9. 59.	47,8		59. 6,66		6,35	62,97		10. 0.	9,36		M
	ρ^2 Leonis.....	9,0	22,9	36,0	49,6	2,9	16,0	11. 5.	30,1		4. 49,50		49,20			11. 5.	52,27		M
	75 Leonis.....	38,1	51,9	5,3	18,8	32,4	45,6	11. 8.	59,1		8. 18,75		18,45			11. 9.	21,52		M
	(e) β Leonis.....	27,3	40,9	55,1	9,1	22,9	37,1	11. 40.	50,8		40. 9,03		8,73	63,09		11. 41.	11,83		M
Apr. 7	(f) Sirius.....	34,1	47,9	1,8	16,0	30,1	44,0	6. 37.	58,1		37. 16,00		15,71	64,75	1,00	6. 38.	20,49		M
	Castor. <i>sp.</i>	51,8	7,9	23,1	39,5	55,3	10,9	7. 24.	27,2		23. 39,39		39,09	64,70		7. 24.	43,90		M
	Procyon.....	27,8	41,6	54,7	8,6	22,0	35,7	7. 30.	49,1		30. 8,49		8,18	64,75		7. 31.	12,99		M
	Pollux.....	0,9	16,5	31,2	47,0	2,3	17,6	7. 35.	32,9		34. 46,92		46,62	64,84		7. 35.	51,44		M
	B. VIII. 241.....			18,8	32,3	46,1	58,9	8. 9.	12,7		8. 32,29		31,99			8. 9.	36,83		M
	Piazzi VIII. 49...	25,0	38,5	51,8	5,2	18,9	32,6	8. 13.	45,9		13. 5,41		5,11			8. 14.	9,95		M
	B. VIII. 466.....	49,6	3,3	16,6	29,9	43,1	56,9	8. 17.	10,4		16. 29,98		29,68			8. 17.	34,53		M
	β Corvi.....	30,1	44,8	59,1	13,9	28,5	42,8	12. 25.	57,6		25. 13,84		13,54	64,96		12. 26.	18,55		M
	γ Virginis.....	5,8	19,6	33,1	47,0	0,2	13,8	12. 33.	27,0		32. 46,64		46,33			12. 33.	51,35		M
	(g) Σ 1678.....	56,9	10,7	24,2	38,1	52,3	5,9	12. 37.	20,1		36. 38,32		38,02			12. 37.	43,04		M
	Σ 1690.....		46,9	0,3	14,0	27,6	40,9	12. 47.	54,2		47. 13,90		13,60			12. 48.	18,63		M
	Σ 1719.....		56,5	10,1	23,5	36,8	50,5	12. 59.	3,9		58. 23,48		23,18			12. 59.	28,22		M
	53 Virginis.....	5,4	19,8	33,1	47,6	1,4	14,9	13. 3.	29,6		2. 47,40		47,11			13. 3.	52,15		M
	(h) Σ 1733.....	59,9	14,1	27,9	42,0	56,7	10,9	13. 8.	25,0		7. 42,36		42,05			13. 8.	47,10		M
	Σ 1734.....	7,9	21,2	34,7	47,9	1,6	14,9	13. 12.	28,8		11. 48,15		47,84			13. 12.	52,89		M
	Spica.....	19,1	32,8	46,4	0,1	13,9	27,5	13. 16.	41,1		16. 0,13		59,83	65,31		13. 17.	4,88		M
Apr. 8	(i) Rigel.....	20,1	33,5	47,2	....	....	....	5. 5.	....		6. 0,86		0,57	65,78	0,98	5. 7.	6,29		M
	Sirius.....	32,9	46,9	0,8	15,1	29,0	43,1	6. 37.	57,1		37. 14,99		14,70	65,74		6. 38.	20,48		M
	(k) Castor.....	51,0	6,9	22,6	38,9	54,7	10,3	7. 24.	26,2		23. 38,66		38,36	65,75		7. 24.	44,17		M
	Procyon.....	27,0	40,1	53,8	7,4	21,1	34,8	7. 30.	47,9		30. 7,45		7,14	65,77		7. 31.	12,96		M
	Pollux.....	59,9	15,5	30,6	45,9	1,2	16,5	7. 35.	31,7		34. 45,90		45,60	65,84		7. 35.	51,42		M
	ϵ Hydræ.....	49,8	3,6	16,8	30,5	44,0	57,8	8. 38.	11,3		37. 30,55		30,24	65,83		8. 38.	36,10		M
	B.A.C. 4218.....	57,1	10,9	24,8	38,7	51,9	6,0	12. 22.	19,6		21. 38,43		38,12			12. 22.	44,14		M
	β Corvi.....	29,1	43,5	57,9	13,0	27,3	41,8	12. 25.	56,2		25. 12,69		12,39	66,11		12. 26.	18,41		M
	35 Comæ.....	53,1	7,7	22,1	36,8	51,6	5,9	12. 45.	20,5		44. 36,82		36,51			12. 45.	42,54		M
	Σ 1699.....	23,5	38,7	53,5	9,3	24,7	39,8	12. 50.	55,4		50. 9,27		8,97			12. 51.	15,00		M
	Σ 260.....	48,1	3,5	18,7	33,9	49,1	3,9	13. 0.	19,6		59. 33,84		33,54			13. 0.	39,58		M
Apr. 11	(l) * N.P.D. 30°. 59'..	....	....	31,9	58,6	24,9	51,0	13. 10.	16,9		8. 58,51		58,11			13. 10.	4,16		M
	(m) ϵ Hydræ.....	47,2	0,9	14,0	27,9	41,5	55,3	8. 38.	8,6		37. 27,92		27,61	68,41	0,91				M
	(n) Σ 201.....	52,2	7,5	22,4	38,3	....	....	9. 14.	....		13. 38,11		37,81		0,95	9. 14.	49,11		M
	(o) α Hydræ.....	8,8	22,3	35,7	49,4	3,2	16,8	9. 19.	30,2		18. 49,49		49,16	71,28					M
	(p) 23 Leonis.....	48,0	2,5	16,0	....	43,1	57,6	9. 42.	11,3		41. 29,76		29,43			9. 42.	40,75		M
	(m) H. C. 19371.....	....	45,3	59,6	13,2	27,6	40,9	9. 44.	55,0		44. 13,28		12,95			9. 45.	24,27		M
	(o) Regulus.....	16,9	30,6	44,1	58,0	12,2	25,9	9. 59.	39,6		58. 58,19		57,86	71,35					M
	(b) Sirius.....	25,5	39,7	53,5	7,3	21,8	35,3	6. 37.	49,9		37. 7,57		7,23	73,06	0,92	6. 38.	20,32		M
	Procyon.....	19,6	32,9	46,4	59,9	14,0	27,1	7. 30.	40,6		30. 0,08		59,74	73,04		7. 31.	12,87		M
	(b) Pollux.....	52,6	7,9	23,1	38,7	53,9	9,0	7. 35.	24,2		34. 38,49		38,19	73,10		7. 35.	51,32		M
	(q) Σ 1332.....	....	....	56,1	11,5	26,0	40,9	9. 7.	55,7		7. 11,27		10,96			9. 8.	24,15		M
Apr. 16	Δ Hydræ.....	47,8	1,5	14,3	27,9	41,8	55,1	9. 17.	8,7		16. 28,16		27,82			9. 17.	41,02		M
	(r) B. IX. 627.....	5,7	20,2	33,6	47,3	0,6	14,2	9. 27.	27,7		26. 47,05		46,72			9. 27.	59,92		M
	(s) g Virginis.....	55,9	9,7	23,0	36,9	50,5	4,5	12. 59.	17,9		58. 36,92		36,58			12. 59.	49,92		M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = $-0''.74$. From April 14 = $-0''.85$. LEVEL Error = $-1''.61$.
 From April 5 = $-1''.89$. From April 14 = $-1''.55$. AZIMUTH Error = $-2''.94$. From April 14 = $-3''.62$.

(a) Probably 1st in defect. (b) Unsteadiness. (c) The R.A. of B.A.C. exceeds by 1st. (d) Eye-piece out of focus. Counting found 2nd in defect. (e) Haze and great motion. (f) Unsteady. (g) 'Accompanied by a star of less magnitude by one-half.' This is consequently the following star. (h) Very faint. The preceding and smaller of two. (i) Cloudy. (k) It is supposed that the following star was taken: the observation was in day-light. (l) A smaller precedes. (m) Very faint from cloud. (n) Hid by clouds. (o) Faint at times. (p) Quite guess, so faint: 10th have been deducted. (q) 'The companion is fainter.' (r) Not good: hurried. Bessel's R.A. is 1st greater. (s) Cloudy: wire V quite doubtful.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Apr. 16	(a) H. C. 24639.....	1,4	15,8	29,6	43,9	57,1	11,9	13.	8.	26,4	7.	43,74	43,41		0,92	13.	8.	56,75	M
	(a) Spica.....	10,9	24,7	38,1	52,0	5,8	19,4	13.	16.	33,1	15.	52,01	51,67	73,52		13.	17.	5,02	M
	ζ Virginis.....	57,4	10,9	24,0	37,9	51,1	4,8	13.	26.	18,2	25.	37,76	37,43			13.	26.	50,78	M
	(b) Σ 1776.....	13,4	33,3	52,9	13,1	33,0	52,5	13.	35.	11,9	34.	12,87	12,59			13.	35.	25,95	M
	(c) Polaris.....	25,7	....	22,4	55,6	26,9	....	1.	27.	25,6	1.	55,57	55,10		0,95				M
Apr. 17	(d) β Tauri.....	31,6	46,9	2,0	17,1	32,7	47,9	5.	16.	3,5	15.	17,39	17,09	73,99		5.	16.	31,03	M
	Castor. sp.....	42,1	58,4	13,8	30,1	45,6	1,9	7.	24.	17,5	23.	29,92	29,62	73,98		7.	24.	43,64	M
	Procyon.....	18,5	31,9	45,4	59,1	12,6	25,9	7.	30.	39,7	29.	59,02	58,68	74,08		7.	31.	12,71	M
	(e) Pollux.....	51,8	6,9	21,9	37,6	53,1	8,3	7.	35.	23,5	34.	37,59	37,29	73,98		7.	35.	51,32	M
	Σ 1332. sp.....	26,5	40,9	55,6	10,9	25,1	40,0	9.	7.	54,2	7.	10,46	10,15			9.	8.	24,24	M
	(f) B. ix. 298.....	2,5	15,9	29,0	42,1	56,3	9,8	9.	13.	22,6	12.	42,61	42,27			9.	13.	56,36	M
	ω Leonis.....	16,5	30,1	43,9	57,3	11,2	24,8	9.	19.	38,5	18.	57,47	57,13			9.	20.	11,23	M
Apr. 18	ε Hydræ.....	40,2	53,8	7,5	20,9	34,6	47,9	8.	38.	1,7	37.	20,95	20,74	75,17	1,06				M
Apr. 19	(d) Aldebaran.....	5,3	18,9	32,8	47,2	1,1	15,2	4.	26.	29,1	25.	47,09	46,87	76,01	1,04	4.	27.	2,89	M
	(g) β Tauri.....	29,5	44,8	0,1	15,2	30,5	45,9	5.	16.	1,2	15.	15,32	15,10	75,96		5.	16.	31,16	M
	ε Hydræ.....	39,1	52,9	6,4	20,0	33,7	47,1	8.	38.	0,5	37.	19,96	19,74	76,15		8.	38.	35,94	M
	(h) α Hydræ.....	3,7	17,3	30,5	43,9	57,6	11,5	9.	19.	25,1	18.	44,23	44,05	76,32		9.	20.	0,28	M
	(i) H. C. 21896.....	44,5	59,2	13,9	29,0	44,1	58,9	11.	23.	13,7	22.	29,05	28,83			11.	23.	45,15	M
	(k) Σ 1604.....	33,8	47,3	0,9	14,8	28,1	41,9	12.	0.	56,0	0.	14,69	14,51			12.	1.	30,86	M
	B. A. C. 4218.....	....	0,7	14,1	27,9	41,6	55,1	12.	22.	8,8	21.	27,85	27,64			12.	22.	44,00	M
	(l) Σ 1658.....	19,8	33,6	46,9	0,7	14,5	27,8	12.	26.	41,5	26.	0,69	0,47			12.	27.	16,84	M
	γ Virginis.....	54,8	8,4	21,9	35,4	48,8	2,6	12.	23.	16,7	32.	35,51	35,32			12.	33.	51,69	M
	(m) Σ 1678.....	45,1	58,9	13,0	26,9	41,0	54,8	12.	37.	8,7	36.	26,92	26,70			12.	37.	43,07	M
	(n) B. A. C. 4336.....	26,1	39,7	53,2	6,8	20,4	34,5	12.	46.	47,8	46.	6,93	6,71			12.	47.	23,09	M
	g Virginis.....	52,9	6,5	20,0	33,9	47,5	1,1	12.	59.	14,8	58.	33,81	33,63			12.	59.	50,02	M
	(o) H. C. 24639.....	57,9	12,4	26,0	40,9	54,7	9,1	13.	8.	23,3	7.	40,62	40,40			13.	8.	56,80	M
	Spica.....	7,9	21,5	34,8	49,1	2,7	16,2	13.	16.	29,9	15.	48,87	48,69	76,51		13.	17.	5,10	M
	ζ Virginis.....	54,4	7,7	20,9	34,6	48,1	1,8	13.	26.	14,9	25.	34,63	34,43			13.	26.	50,84	M
Apr. 21	ε Hydræ.....	24,9	38,3	51,9	5,5	19,0	32,7	8.	38.	46,3	38.	5,51	5,29	30,57	1,10	8.	38.	35,93	M
	α Hydræ.....	49,4	2,9	16,1	29,9	43,5	57,1	9.	20.	10,8	19.	29,96	29,78	30,56		9.	20.	0,46	M
	Regulus.....	57,1	10,9	24,6	38,8	52,5	6,2	10.	0.	20,0	59.	38,59	38,37	30,75		10.	0.	9,08	M
	(p) Σ 1465.....	39,9	58,8	17,5	37,2	56,7	15,9	10.	34.	35,0	33.	37,29	37,03			10.	34.	7,77	M
	(q) Σ, 228.....	40,0	54,9	9,3	24,1	38,9	53,8	10.	39.	7,9	38.	24,14	23,92			10.	38.	54,66	M
	(r) Σ 1506.....	....	....	9,2	22,8	36,4	49,8	10.	57.	3,2	56.	22,79	22,60			10.	56.	53,35	M
	(s) Σ, 231.....	18,1	33,9	49,5	5,7	20,9	36,8	11.	2.	52,8	2.	5,39	5,15			11.	2.	35,90	M
	n Leonis.....	35,4	49,7	3,2	17,5	31,3	44,9	11.	7.	59,1	7.	17,30	17,08			11.	7.	47,84	M
	75 Leonis.....	....	....	....	50,9	4,2	17,9	11.	9.	31,2	8.	50,79	50,59			11.	9.	21,35	M
	Σ, 234.....	3,4	21,6	39,1	57,9	16,1	33,8	11.	22.	52,6	21.	57,79	57,53			11.	22.	28,30	M
	(t) β Leonis.....	59,1	13,3	26,9	41,4	54,9	9,1	11.	41.	22,5	40.	41,03	40,81	30,93		11.	41.	11,60	M
	(u) Polaris.....	11,4	43,7	6,5	43,7	14,5	40,8	1.	28.	10,7	2.	41,61	37,12		1,24	1.	3.	8,41	M
Apr. 22	(u) Rigel.....	....	....	21,1	34,8	48,6	2,0	5.	7.	15,8	6.	34,85	34,67	31,50		5.	7.	6,17	M
	(u) β Tauri.....	13,9	29,1	43,9	0,0	14,8	30,4	5.	16.	45,8	15.	59,71	59,49	31,53		5.	16.	31,00	M
	Castor. sp.....	24,9	40,6	56,5	12,6	28,1	43,9	7.	24.	59,7	24.	12,34	12,10	31,40		7.	24.	43,72	M
	Procyon.....	0,7	14,5	27,9	41,2	54,8	8,5	7.	31.	22,0	30.	41,38	41,17	31,51		7.	31.	12,80	M
	Pollux.....	33,8	49,0	4,2	19,9	34,9	50,3	7.	36.	5,5	35.	19,66	19,44	31,73		7.	35.	51,07	M
	(x) B. x. 916.....	9,0	23,5	36,9	50,4	3,9	17,1	10.	50.	30,8	49.	50,23	50,04			10.	50.	21,84	M
	B. A. C. 3831.....	19,8	34,4	48,3	2,9	17,3	31,8	11.	5.	46,2	5.	2,96	2,73			11.	5.	34,54	M
	ξ Ursæ Majoris...	37,3	52,9	8,9	25,1	41,0	56,9	11.	10.	13,0	9.	25,01	24,77			11.	9.	56,59	M
	Σ 1535.....	48,1	1,6	14,9	28,5	41,9	55,0	11.	15.	8,9	14.	28,42	28,22			11.	15.	0,04	M
	(y) H. C. 21896.....	28,5	43,8	58,1	13,5	28,1	43,3	11.	23.	58,0	23.	13,34	13,12			11.	23.	44,95	M
	β Leonis.....	57,9	12,0	25,9	40,1	54,0	7,9	11.	41.	22,0	40.	39,98	39,76	31,97		11.	41.	11,61	M
	(x) Σ 1576.....	34,2	50,4	5,9	22,0	37,1	52,9	11.	45.	9,3	44.	21,69	21,45			11.	44.	53,30	M
	B. xii. 473.....	40,9	54,7	7,9	22,2	35,8	49,5	12.	28.	3,1	27.	22,02	21,84			12.	27.	53,72	M
	(z) Polaris SP.....	....	31,8	5,5	30,8	6,5	28,6	13.	27.	59,8	2.	32,15	36,42			13.	3.	8,33	M
	(aa) Spica.....	52,4	5,9	19,7	33,5	46,8	0,6	13.	17.	14,5	16.	33,35	33,17	32,04		13.	17.	5,10	M
	Σ 1781.....	10,9	24,1	37,7	51,4	4,9	18,3	13.	38.	31,9	37.	51,32	51,10			13.	38.	23,04	M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = -0",85. LEVEL Error = -1",55. From April 19 = -1",61. AZIMUTH Error = -3",62. From April 18 = -0",99. April 20, 23^h. Hardy was put forward 1^m.

(a) Very faint from cloud. (b) Observed as single, both stars being very faint. The counting was found 1^s in defect, and the observation has been corrected accordingly. (c) High wind and clouds passing. (d) Unsteady and very faint. (e) High wind. (f) 'The north-preceding of two.' The intervals are irregular. (g) Unsteady. (h) Field not illumined. (i) Probably Σ 1549, but the R.A. does not agree with Struve's. (k) 'A very faint star follows.' (l) A smaller precedes. (m) 'Accompanied by a star of mag. 7.' This is the brighter. (n) A small star follows. See May 17. (o) 'A brighter precedes.' (p) Very faint and doubtful: 1^s has been added conjecturally. See March 28 and April 23. (q) 1^m has been added. (r) Disturbance. (s) Preceded by a very small star. (t) Hid at times. (u) Indistinct and unsteady. (x) Faint. (y) The noted time was 1^m greater. (z) Bad definition. (aa) Blazing.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.			
Apr. 22	(a) Σ , 273.....	24,1	37,2	50,8	4,5	18,0	30,9	13. 48. 44,5	48. 4,29	4,07		1,24	13. 48. 36,02	M		
	(b) Polaris	9,8	39,8	6,8	42,6	9,7	40,9	1. 28. 12,0	2. 40,23	35,74		1,43	1. 3. 8,43	M		
Apr. 23	Procyon.....	59,0	12,9	26,3	40,0	53,5	6,9	7. 31. 20,4	30. 39,86	39,65	33,02		7. 31. 12,73	M		
	Pollux.....	32,4	47,9	2,9	18,4	33,8	48,7	7. 36. 3,9	35. 18,29	18,07	33,09		7. 35. 51,15	M		
	Regulus	54,9	8,6	22,1	36,0	49,8	3,7	10. 0. 17,2	59. 36,04	35,82	33,27		10. 0. 9,05	M		
	(c) Σ 1465.....	36,3	55,9	14,9	34,7	53,9	13,0	10. 34. 32,1	33. 34,40	34,14			10. 34. 7,40	M		
	Σ , 228.....	36,9	51,8	7,0	21,9	36,5	50,9	10. 39. 5,9	38. 21,56	21,34			10. 38. 54,60	M		
	Σ 1500.....	57,4	10,9	24,2	37,9	51,1	4,4	10. 52. 17,9	51. 37,69	37,50			10. 52. 10,78	M		
	Σ 1506.....	39,8	53,1	6,7	20,2	33,7	46,9	10. 57. 0,1	56. 20,08	19,89			10. 56. 53,17	M		
	Piazzi XI. 14.	10,7	27,8	44,6	2,0	18,9	36,5	11. 6. 53,6	6. 2,02	1,78			11. 6. 35,07	M		
	(d) ξ Ursæ Majoris...	35,5	51,0	7,4	23,3	39,7	55,2	11. 10. 11,5	9. 23,38	23,14			11. 9. 56,43	M		
	Σ 1534	28,2	42,9	56,9	11,0	25,9	40,1	11. 13. 54,0	13. 11,29	11,06			11. 13. 44,36	M		
	ϵ Leonis.....	....	52,0	5,9	20,0	33,8	47,5	11. 16. 1,4	15. 19,90	19,69			11. 15. 52,99	M	
	(e) Σ 1576.....	33,1	48,9	4,5	20,7	36,1	51,8	11. 45. 7,9	44. 20,43	20,19			11. 44. 53,52	M		
	(f) γ Comæ.....	25,6	40,2	54,8	9,6	23,9	38,0	12. 45. 52,8	45. 9,28	9,05			12. 45. 42,44	M		
	k Virginis.....	30,1	43,4	56,8	10,3	23,8	37,1	12. 51. 50,9	51. 10,35	10,16			12. 51. 43,55	M		
	Σ , 260.....	20,8	36,0	50,8	6,5	21,6	36,9	13. 0. 51,8	0. 6,35	6,13			13. 0. 39,54	M		
	Spica.....	51,0	4,9	18,2	31,9	45,8	59,0	13. 17. 12,9	16. 31,96	31,78	33,43		13. 17. 5,20	M		
Apr. 24	(a) Σ 3078.....	9,3	22,9	36,9	50,7	4,1	17,8	12. 1. 31,9	0. 50,52	50,31		1,40	12. 1. 25,05	M		
	β Corvi.....	0,6	14,9	29,3	44,0	58,6	13,2	12. 26. 27,9	25. 44,08	43,92	34,57		12. 26. 18,68	M		
	Σ 1699.....	54,6	9,9	25,0	40,7	55,4	10,9	12. 51. 26,1	50. 40,38	40,16			12. 51. 14,95	M		
	(a) Σ , 260.....	19,7	34,7	49,8	4,9	20,1	35,5	13. 0. 50,7	0. 5,06	4,84			13. 0. 39,64	M		
	(f) H. C. 24744.....	27,1	41,8	55,5	10,1	24,1	38,2	13. 12. 52,7	12. 9,93	9,70			13. 12. 44,51	M		
	(g) Σ 1737.....	0,1	15,5	29,1	43,7	57,9	11,9	13. 14. 26,1	13. 43,48	43,25			13. 14. 18,06	M		
	B.A.C. 4530.....	10,2	23,9	36,9	50,3	4,1	17,8	13. 26. 31,0	25. 50,61	50,41			13. 26. 25,23	M		
	(h) Σ , 273.....	20,9	....	48,1	1,8	15,3	28,7	13. 48. 41,9	48. 1,61	1,39			13. 48. 36,23	M	
	(i) Σ 1805.....	57,2	10,8	23,9	37,5	51,0	4,7	14. 2. 18,1	1. 37,60	37,40			14. 2. 12,26	M		
	Arcturus.....	20,8	35,1	49,2	3,8	18,1	32,5	14. 8. 46,8	8. 3,77	3,54	34,98		14. 8. 38,40	M		
	(h) Σ 1850.....	25,9	41,0	56,3	11,9	27,0	42,6	14. 21.	21. 11,82	11,60			14. 21. 46,47	M		
	ϵ Bootis.....	55,7	10,8	25,9	41,0	56,5	11,7	14. 38. 26,8	37. 41,21	40,99	34,96		14. 38. 15,88	M		
Apr. 25	(a) α Hydræ.....	43,9	57,4	10,8	24,7	38,2	51,8	9. 20. 5,3	19. 24,59	24,38	35,90	1,38		M		
	(k) Regulus .....	....	....	19,1	32,8	47,0	0,7	10. 0. 14,5	59. 33,02	32,76	36,31			M
Apr. 26	(l) ϵ Hydræ.....	17,9	31,8	45,2	58,8	12,4	25,9	8. 38. 39,3	37. 58,76	58,50	37,28	1,39	8. 38. 35,77	M		
	(m) Regulus.....	50,3	4,5	17,9	31,6	45,7	59,3	10. 0. 12,8	59. 31,74	31,48	37,57		10. 0. 8,83	M		
	(n) Σ 1658.....	58,9	12,6	25,8	39,9	53,4	6,9	12. 27. 20,2	26. 39,68	39,42			12. 27. 16,91	M		
	(o) Spica.....	46,9	0,7	13,9	28,1	41,9	55,6	13. 17. 9,1	16. 28,03	27,82	37,40		13. 17. 5,36	M		
	(p) Arcturus.....	18,3	32,8	46,9	1,0	15,7	29,9	14. 8. 44,4	8. 1,29	1,01	37,52		14. 8. 38,60	M		
May 1	(p) Spica.....	39,8	53,5	6,9	20,6	34,5	48,1	13. 17. 1,8	16. 20,75	20,54	44,69	1,48		M		
	(a) Σ , 266.....	29,1	43,2	56,6	10,9	25,0	38,9	13. 20. 53,0	20. 10,96	10,69			13. 20. 55,52	M		
	Σ 1781	57,9	11,6	24,9	38,5	52,0	5,9	13. 38. 19,0	37. 38,55	38,29			13. 38. 23,14	M		
	(p) Arcturus.....	10,8	25,3	39,6	53,9	8,1	22,5	14. 8. 36,4	7. 53,81	53,53	45,02			M		
May 2	(p) Rigel.....	39,8	53,2	6,8	20,6	34,1	47,6	5. 7. 1,4	6. 20,51	20,30	45,78	1,49	5. 7. 6,11	M		
	β Tauri.....	59,6	14,9	30,1	45,6	0,9	16,0	5. 16. 31,3	15. 45,49	45,21	45,73		5. 16. 31,03	M		
	(p) α Hydræ.....	33,7	47,0	0,5	14,5	27,9	41,4	9. 19. 54,9	19. 14,27	14,06	46,12		9. 20. 0,13	M		
	(p) ξ Ursæ Majoris...	22,9	39,0	54,4	10,6	25,8	42,3	11. 9. 58,4	9. 10,49	10,19			11. 9. 56,37	M		
	(q) β Leonis.....	43,6	57,9	11,4	25,9	....	53,7	11. 41. 7,4	40. 25,66	25,39	46,26		11. 41. 11,61	M	
	(q) Σ 3078	57,6	11,5	24,9	38,9	52,5	6,7	12. 1. 19,9	0. 38,86	38,60			12. 1. 24,83	M		
	(q) Σ 1737	49,7	3,9	17,3	32,5	46,2	0,5	13. 14. 14,1	13. 32,04	31,76			13. 14. 18,07	M		
	Σ 1781	56,4	9,8	23,5	37,0	50,7	4,1	13. 38. 17,7	37. 37,03	36,77			13. 38. 23,10	M		
	Σ , 273.....	9,7	23,5	36,7	50,0	3,9	17,6	13. 48. 30,9	47. 50,33	50,07			13. 48. 36,42	M		
	(r) Σ 1805	45,7	59,4	12,2	26,2	39,8	53,3	14. 2. 6,8	1. 26,20	25,96			14. 2. 12,32	M		
	(s) Arcturus.....	9,4	23,9	37,8	52,7	6,6	21,0	14. 8. 35,5	7. 52,42	52,14	46,41		14. 8. 38,50	M		
	2 Libræ	41,8	55,5	8,9	22,9	36,7	50,1	14. 15. 3,9	14. 22,84	22,63			14. 15. 9,00	M		
	Σ 1879.....	18,0	31,9	45,2	59,0	12,8	26,7	14. 38. 40,0	37. 59,09	58,83			14. 38. 45,23	M		
	(t) Σ 1884 .....	....	....	32,7	47,9	2,8	17,3	14. 41. 32,5	40. 47,78	47,51			14. 41. 33,91	M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = -0",85. LEVEL Error = -1",61. From April 25 = -2",47.
 AZIMUTH Error = -0",99.

(a) Faint. (b) Faint and tremulous. (c) Disturbance. The counting being found 2^s in defect, wire VII has been increased 2^s, and each of the others 1^s. (d) Hurriedly. (e) Very faint; appeared double. (f) The noted time was 1^m greater. (g) Considered to be of 8,9 mag. (h) Cloudy. (i) Appeared double. (k) Disturbance. (l) Star very faint, and high wind. (m) Lazy. (n) A fainter precedes about 5^s. (o) Wires VI and VII were 1^s in excess. (p) Observed through cloud: generally faint. (q) Faint from cloud. (r) Very faint. (s) Blazing: difficult to observe. (t) Did not appear double.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
May 3	(a) Σ 1500 .....	....	56,2	9,5	23,0	36,8	50,2	10.52.	3,8		51.23,18	22,96			1,45	10.52.	10,63		M
	B.A.C. 3831	3,9	18,7	32,5	47,1	1,7	15,9	11.5.	30,1		4.47,13	46,85				11.5.	34,54		M
	Σ 1534	14,4	28,9	42,7	57,1	11,6	25,8	11.13.	39,9		12.57,20	56,92				11.13.	44,62		M
	(b) Leonis .....	....	38,2	51,8	5,7	19,4	33,1	11.15.	46,8		15.5,63	5,37				11.15.	53,07		M
	(c) H. C. 21896	12,9	27,8	42,5	57,8	12,8	27,4	11.23.	42,5		22.57,67	57,40				11.23.	45,11		M
	(b) Σ 1604	2,4	15,8	29,6	42,9	57,0	10,8	12.1.	24,4		0.43,28	43,07				12.1.	30,81		M
	(d) β Corvi	47,4	1,9	16,2	31,0	45,5	0,1	12.26.	14,8		25.30,99	30,81	47,65			12.26.	18,58		M
	Σ 1699 .....	....	56,6	11,9	27,5	42,3	57,9	12.51.	13,1		50.27,23	26,95				12.51.	14,74		M
	* N.P.D. 30°. 59' ..	....	....	....	16,8	42,9	9,5	13.10.	35,2		9.16,80	16,34				13.10.	4,15		M
	(e) Σ 1737	48,0	1,9	16,1	31,0	44,8	59,1	13.14.	13,4		13.30,62	30,34				13.14.	18,16		M
	Σ 266	25,9	40,0	54,0	8,4	22,1	35,8	13.20.	50,1		20.8,05	7,78				13.20.	55,60		M
	B.A.C. 4530	57,6	10,9	24,3	37,9	51,4	4,9	13.26.	18,1		25.37,87	37,64				13.26.	25,47		M
	(f) Σ 1805	44,0	57,8	10,9	25,0	38,4	51,9	14.2.	5,3		1.24,76	24,52				14.2.	12,39		M
	(g) Arcturus	7,9	22,4	36,6	50,9	5,1	19,5	14.8.	33,8		7.50,89	50,61	47,94			14.8.	38,48		M
	2 Libræ	40,1	53,9	7,4	21,1	34,9	48,8	14.15.	2,6		14.21,26	21,05				14.15.	8,93		M
	ϵ Bootis	42,8	57,7	13,0	28,6	43,5	58,8	14.38.	13,9		37.28,33	28,05	47,97			14.38.	15,95		M
May 5	(h) B.A.C. 3831	1,6	15,8	29,9	44,2	58,9	13,5	11.5.	27,9		4.44,55	44,25			1,19	11.5.	34,41		M
	(h) Σ 1535	29,6	43,0	56,3	9,8	23,2	36,8	11.14.	50,2		14.9,85	9,60				11.14.	59,76		M
	(h) β Leonis	39,8	54,0	7,4	21,6	35,7	50,0	11.41.	3,4		40.21,71	21,43	50,19						M
	(h) Σ 1576	15,9	31,7	47,5	3,8	19,5	35,4	11.44.	51,1		44.3,57	3,25				11.44.	53,44		M
	(i) Σ 1604	59,9	13,6	26,8	41,0	54,6	8,0	12.1.	21,7		0.40,81	40,63				12.1.	30,83		M
	(k) B. XII. 464	2,5	16,6	29,8	43,5	57,6	10,9	12.27.	24,8		26.43,68	43,47				12.27.	33,69		M
May 7	(l) Spica	31,8	45,6	59,1	12,9	26,6	40,3	13.16.	53,9		16.12,89	12,66	52,56		1,08				M
May 9	β Leonis .....	....	....	3,5	17,2	30,9	45,4	11.40.	59,2		40.17,27	16,97	54,62		1,14	11.41.	11,50		M
	(m) B. XII. 464	58,1	12,5	25,9	40,0	53,1	6,9	12.27.	21,0		26.39,65	39,42				12.27.	33,98		M
	k Virginis	8,9	22,2	35,8	49,4	2,8	16,4	12.51.	29,8		50.49,33	49,07				12.51.	43,65		M
	Spica	29,9	43,6	57,1	10,9	24,7	38,1	13.16.	51,8		16.10,88	10,65	54,57			13.17.	5,25		M
	(n) Σ 266	19,4	32,8	47,2	1,6	15,4	29,6	13.20.	43,5		20.1,36	1,05				13.20.	55,65		M
	(l) B.A.C. 4530	50,6	4,4	16,9	31,0	44,5	57,8	13.26.	11,2		25.30,92	30,66				13.26.	25,27		M
	Arcturus	1,0	15,8	29,7	44,5	58,8	2,9	14.8.	17,2		7.44,28	43,98	54,59			14.8.	38,62		M
	Piazzi XIV. 126 ..	16,1	43,9	11,3	39,5	6,9	34,6	14.28.	2,7		26.39,29	38,75				14.27.	33,41		M
	ϵ Bootis	36,0	51,2	6,5	21,9	37,0	51,9	14.38.	7,2		37.21,68	21,37	54,67			14.38.	16,03		M
	* N.P.D. 27°. 48' ..	42,6	11,7	39,9	9,4	37,8	7,0	14.44.	35,9		43.9,19	8,64				14.44.	3,31		M
May 10	Arcturus	59,9	14,6	28,1	42,9	57,4	11,9	14.8.	26,0		7.42,98	42,68	55,89		1,22				M
May 12	(o) Regulus	29,9	43,4	56,9	11,1	25,0	38,6	9.59.	52,4		59.11,05	10,76	58,08		1,32	10.0.	8,80		M
	(l) β Leonis	31,9	45,6	59,4	14,0	27,7	41,2	11.40.	55,6		40.13,64	13,35	58,21			11.41.	11,47		M
	(p) Spica	26,4	39,8	54,0	7,3	20,9	34,8	13.16.	48,2		16.7,34	7,11	58,11			13.17.	5,33		M
	(q) Σ 1953	42,5	55,9	....	22,8	....	....	15.25.	....		24.22,94	22,66				15.25.	21,00		M
	(r) 42 Libræ	29,1	43,9	58,5	....	27,9	42,4	15.30.	56,8		30.13,11	12,90				15.31.	11,24		M
May 13	(s) Polaris	54,9	27,0	....	19,6	51,5	19,3	1.27.	47,3		2.20,98	14,99			1,45	1.3.	15,47		M
May 14	(g) Polaris SP.	43,5	11,6	34,8	6,1	37,5	7,6	13.27.	40,7		2.8,83	14,48				13.3.	15,69		M
	k Virginis	2,2	15,8	29,0	42,7	56,1	9,8	12.51.	23,4		50.42,72	42,46				12.51.	43,65		M
	Spica	23,5	37,0	50,6	4,4	17,9	31,5	13.16.	45,2		16.4,30	4,07	61,14						M
	Arcturus	54,4	8,9	23,0	37,7	51,9	6,2	14.8.	20,5		7.37,52	37,22	61,35						M
May 17	(g) β Corvi	29,6	44,4	58,6	13,2	27,9	42,2	12.25.	56,9		25.13,26	13,05	65,32		1,40	12.26.	18,42		M
	(t) * N.P.D. 81°. 19' ..	41,9	55,5	9,0	22,6	36,7	....	12.47.	3,8		46.22,79	22,50				12.47.	27,90		M
	(g) Spica	19,2	32,7	46,1	0,2	13,8	27,5	13.16.	41,0		16.0,08	59,84	65,36			13.17.	5,26		M
	(o) Σ 1878	43,8	12,5	40,7	9,9	38,0	6,8	14.38.	35,0		37.9,53	9,03				14.38.	14,53		M
	α^2 Libræ .....	....	....	2,7	17,0	30,9	44,8	14.41.	58,5		41.16,82	16,57	65,76			14.42.	22,08		M
	Σ 1921. sf.	9,5	26,9	44,0	1,6	18,1	36,0	15.5.	53,6		5.1,39	1,04				15.6.	6,57		M
	(u) Σ 1931	32,9	46,5	0,1	13,9	28,0	41,2	15.10.	54,9		10.13,93	13,64				15.11.	19,18		M
	(x) B. xv. 358	22,5	36,0	49,2	2,9	16,8	30,1	15.18.	43,7		18.3,04	2,75				15.19.	8,29		M
	(y) Σ 1953	34,8	48,5	1,9	16,0	29,6	42,7	15.24.	55,9		24.15,63	15,34				15.25.	20,89		M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = -0",85. LEVEL Error = -2",47. From May 5 = -2",73. From May 12 = -2",63. From May 17 = -2",80. AZIMUTH Error = -0",99. From May 7 = -1",37.

(a) Very faint. (b) Much clouded. (c) A much fainter followed. (d) Misty. (e) Unsteadiness. (f) Observed as single: faint. (g) Radiating. (h) Much obscured by mist. (i) A star of mag. 10 follows. (k) Cloudy at wire VII. (l) Faint. (m) Flickering: not good. (n) Disturbance. (o) Unsteady. (p) Eye-piece out of focus. (q) Too cloudy for more wires. (r) Very faint from cloud. The night was generally cloudy, and the wind high. (s) Clouds continually passing. (t) 'Mag. 9,10.' Observed in 1839. (u) A faint companion. (x) Σ 1943 follows. (y) A somewhat brighter follows about 12".

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.				
May 17	42 Libræ.....	21,9	36,8	51,5	6,4	21,0	35,5	15. 30. 50,2	30. 6,19	5,98			1,40	15. 31. 11,53		M	
	(a) α Serpentis.....	55,4	8,9	22,4	36,5	49,9	3,5	15. 36. 16,8	35. 36,20	35,91	65,42			15. 36. 41,47		M	
	(b) Σ 1973.....	....	1,5	17,8	34,9	51,6	8,4	15. 40. 25,0	39. 34,77	34,42				15. 40. 39,99		M
May 22	Arcturus.....	43,9	58,1	11,9	26,8	40,9	55,7	14. 8. 9,8	7. 26,73	26,41	72,15		1,36	14. 8. 38,54		M	
	(c) Piazzi XIV. 126..	58,7	26,3	53,6	22,0	49,6	17,2	14. 27. 44,8	26. 21,75	21,26				14. 27. 33,41		M	
	(d) ε Bootis.....	18,8	33,9	48,6	4,3	19,7	34,6	14. 37. 49,8	37. 4,25	3,93	72,13			14. 38. 16,09		M	
	(c) * N.P.D. 27°. 48'.	24,8	54,1	22,4	51,6	20,7	49,5	14. 44. 18,1	42. 51,61	51,12				14. 44. 3,28		M	
	Σ 1931.....	26,2	39,9	53,7	7,4	21,0	34,9	15. 10. 48,6	10. 7,39	7,09				15. 11. 19,28		M	
	(e) Σ 1935.....	54,6	10,5	25,9	41,8	57,0	13,3	15. 13. 29,2	12. 41,76	41,43				15. 13. 53,62		M	
	α Coronæ Borealis.	13,5	28,4	43,2	58,8	13,9	29,0	15. 27. 44,0	26. 58,69	58,37	72,27			15. 28. 10,57		M	
	(f) H. C. 28506.....	....	52,9	8,6	24,5	39,9	55,6	15. 30. 10,9	29. 24,24	23,91				15. 30. 36,12		M
	α Serpentis.....	48,9	2,6	15,9	29,7	43,4	56,8	15. 36. 10,0	35. 29,62	29,33	72,15			15. 36. 41,54		M	
	(c) Σ 1973. sf.....	37,8	54,7	11,2	28,5	45,2	1,9	15. 40. 18,9	39. 28,32	27,96				15. 40. 40,17		M	
May 24	Σ 1973. sf.....	35,1	51,9	8,6	25,7	42,5	59,1	15. 40. 16,1	39. 25,57	25,20				15. 40. 40,13		M	
May 26	Spica.....	6,9	20,6	34,1	47,9	1,5	15,2	13. 16. 28,8	15. 47,86	47,61	77,55		1,44	13. 17. 5,22		M	
	(e) Σ 1934.....	45,9	4,7	23,2	42,1	0,8	19,5	15. 11. 38,1	10. 42,05	41,67				15. 11. 59,39		M	
	(g) Σ 1942.....	....	....	42,0	56,1	10,9	25,1	15. 18. 39,9	17. 56,28	55,95				15. 19. 13,68		M
	α Coronæ Borealis.	7,8	22,9	37,9	53,2	8,3	23,5	15. 27. 38,5	26. 53,16	52,84	77,82			15. 28. 10,57		M	
	η Libræ.....	26,1	39,9	53,9	8,0	21,9	35,7	15. 34. 49,8	34. 7,90	7,66				15. 35. 25,40		M	
	(h) Σ 1977.....	1,4	15,8	30,9	46,1	0,8	15,9	15. 42. 30,9	41. 45,97	45,65				15. 43. 3,40		M	
	(e) Piazzi XV. 220...	35,1	48,5	2,1	15,9	29,3	42,8	15. 48. 56,4	48. 15,73	15,44				15. 49. 33,20		M	
	Σ 2007.....	53,9	7,9	21,5	35,8	49,3	3,5	15. 58. 16,9	57. 35,54	35,23				15. 58. 53,00		M	
	δ Ophiuchi.....	19,2	32,8	46,0	59,8	13,3	26,5	16. 5. 39,9	4. 59,65	59,38	77,76			16. 6. 17,16		M	
	(i) Σ 2052.....	6,8	20,9	35,0	49,4	3,5	17,7	16. 21. 31,9	20. 49,32	49,00				16. 22. 6,79		M	
(k) Polaris.....	47,6	17,9	40,6	18,2	....	....	1. 2.	2. 14,87	8,73			1,46	1. 3. 27,05		M	
May 27	(k) α Hydræ.....	0,7	13,9	27,5	41,4	54,9	....	9. 18.	18. 41,28	41,03	78,82			9. 19. 59,86		M
	(l) Polaris SP.....	....	....	....	1,7	37,5	58,4	13. 27. 27,6	2. 2,51	8,27				13. 3. 27,32		M
	(m) Spica.....	5,5	18,9	32,5	46,5	59,9	13,7	13. 16. 27,4	15. 46,34	46,09	79,07			13. 17. 5,16		M	
	ε Bootis.....	11,4	26,9	41,6	56,9	12,4	27,5	14. 37. 42,9	36. 57,09	56,76	79,29			14. 38. 15,91		M	
	(k) Σ 2011.....	21,4	36,6	51,9	7,9	23,0	38,5	16. 0. 53,9	0. 7,60	7,27				16. 1. 26,50		M	
	(n) Σ 2017.....	....	16,7	30,5	44,8	58,2	12,1	16. 4. 25,9	3. 44,40	44,09				16. 5. 3,33		M
	(o) Antares.....	54,9	9,9	24,7	40,1	54,9	10,0	16. 19. 24,8	18. 39,91	39,70	79,12			16. 19. 58,95		M	
May 30	Regulus.....	4,4	17,9	31,9	46,0	59,6	13,4	10. 0. 27,3	59. 45,79	45,47	23,14		1,35			M	
	Spica.....	0,8	14,6	27,8	41,7	55,4	9,1	13. 17. 22,9	16. 41,76	41,51	23,64					M	
	(p) Σ 1823.....	12,6	26,1	39,8	53,6	7,3	21,5	14. 8. 35,0	7. 53,71	53,40				14. 8. 16,92		M	
	(q) Piazzi XIV. 126..	46,2	13,6	41,1	9,7	36,9	4,9	14. 28. 33,0	27. 9,35	8,84				14. 27. 32,38		M	
	(r) Σ 1878.....	25,6	54,5	22,6	51,8	19,9	49,6	14. 39. 18,2	37. 51,75	51,24				14. 38. 14,79		M	
May 31	(o) Regulus.....	2,9	17,0	30,5	44,6	58,1	11,9	10. 0. 25,8	59. 44,40	44,08	24,52		1,33			M	
June 1	(o) Polaris.....	42,5	13,4	32,7	12,1	43,1	....	1. 28. 36,5	3. 9,61	5,64			1,72			M
	Polaris M.....	2,5	44,2	27,6	12,1	53,6	37,4	1. 5. 18,8	3. 8,36	4,39						M	
June 2	(s) Polaris M.....	0,5	46,2	27,5	11,1	56,4	36,9	1. 5. 17,5	3. 8,33	4,36						M	
June 3	(s) Procyon.....	2,5	15,9	29,4	43,1	56,8	10,1	7. 31. 23,7	30. 43,08	42,80	29,45					M	
	(t) Pollux.....	35,7	50,8	5,9	21,5	36,8	51,9	7. 36. 7,5	35. 21,45	21,17	29,51					M	
June 4	(s) β Corvi.....	2,9	17,6	....	46,9	2,0	15,9	12. 26. 30,7	25. 46,87	46,63	31,58		1,58	12. 26. 18,23		M
	(l) Arcturus.....	24,1	38,4	52,7	7,2	21,6	35,8	14. 8. 49,9	8. 7,10	6,82	31,68			14. 8. 38,53		M	
	Piazzi XIV. 126..	38,8	6,9	33,9	2,2	29,9	57,5	14. 28. 24,9	27. 2,02	1,64				14. 27. 33,37		M	
	(u) * N.P.D. 27°. 48'.	4,9	34,3	2,7	31,9	1,0	29,5	14. 44. 58,4	43. 31,82	31,44				14. 44. 3,19		M	
	(x) Σ 1943.....	48,8	2,5	15,9	30,1	....	56,5	15. 20. 9,8	19. 29,53	29,25				15. 20. 1,04		M
	α Coronæ Borealis.	53,7	8,9	23,6	39,1	54,5	9,7	15. 28. 24,2	27. 39,10	38,82	31,85			15. 28. 10,62		M	
	(y) γ Coronæ Borealis.	0,4	15,7	30,3	45,8	0,7	15,9	15. 36. 30,6	35. 46,09	45,81				15. 36. 17,62		M	
	(z) Σ 1977.....	46,9	2,2	16,7	31,5	46,5	1,9	15. 43. 16,5	42. 31,75	31,47				15. 43. 3,29		M	

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = -0",85. LEVEL Error = -2",80. From May 24 = -2",62. From May 30 = -2",96. From June 1 = -2",05. AZIMUTH Error = -1",37. From May 22 = -1",53. From June 1 = -1",94. May 29, 22^h. Hardy was put forward 1^m.

(a) Disturbance. (b) 'A smaller companion.' This appears to be H. C. 28801, or 28803, and the companion to be H. C. 28799, or 28800. (c) The Telescope does not keep its position. (d) Wind. (e) Seen double. (f) Mistaken for Σ 1963. (g) Very faint. (h) A very small companion. (i) 'A close double beautifully defined.' (k) Clouds. (l) A great deal of ray. (m) Wires VI and VII have been increased 1". (n) The south-following and brighter of two. (o) Hazy. (p) Indistinct, but appeared double. (q) Confused, the eye-glass being out of focus. The observation is 1" in defect as compared with those of May 9, 22, and June 4. (r) Doubtful, the star being obscured by cloud. (s) Great motion. (t) Between wires I and II the Telescope moved. (u) Obscured by thin cloud. (x) Too faint at wire V. (y) Confused by a noise. (z) Disturbance. Companion just visible.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
June 5	(a) Regulus.....	54,6	8,3	21,9	35,9	50,0	3,7	10.	0.	17,4	59.	35,97	35,69	32,86	1,54	10.	0.	8,55	M
	(b) Spica.....	51,3	4,9	18,5	32,6	46,0	59,7	13.	17.	13,4	16.	32,35	32,10	33,00		13.	17.	5,17	M
	Arcturus.....	22,7	37,0	51,1	5,5	19,8	34,4	14.	8.	48,5	8.	5,57	5,29	33,20		14.	8.	38,41	M
June 6	Regulus.....	....	6,7	20,3	34,5	48,1	1,9	10.	0.	15,8	59.	34,31	34,03	34,51	1,68				M
June 7	α Coronæ Borealis.	48,8	3,9	19,3	34,5	49,9	5,0	15.	28.	19,9	27.	34,48	34,11	36,55	1,66				M
	(a) α Serpentis.....	24,7	38,1	51,6	5,3	18,9	32,4	15.	36.	45,8	36.	5,26	4,89	36,65					M
June 8	(b) Polaris.....	38,7	8,6	30,2	9,9	....	3,1	1.	28.	33,5	3.	5,67	1,31		1,61	1.	3.	40,17	M
June 9	Polaris SP.	28,4	59,5	26,7	55,1	31,3	52,8	13.	28.	22,1	2.	56,56	0,39			13.	3.	40,05	M
	(c) Arcturus.....	16,1	30,6	44,8	59,3	13,8	27,7	14.	8.	41,5	7.	59,12	58,74	39,73		14.	8.	38,47	M
	α Ophiuchi.....	26,8	40,6	53,9	8,5	22,1	35,9	17.	27.	49,7	27.	8,22	7,85	40,03		17.	27.	47,82	M
	(d) μ^1 Sagittarii.....	10,8	25,2	39,5	53,9	8,3	23,1	18.	4.	37,4	3.	54,04	53,73	39,94		18.	4.	33,73	M
	(b) Polaris.....	37,4	8,8	30,5	6,2	33,8	0,3	1.	28.	29,6	3.	3,80	59,45		1,71	1.	3.	39,84	M
June 10	ϵ Bootis.....	49,5	4,7	19,6	34,9	50,3	5,5	14.	38.	20,6	37.	35,01	34,64	41,35		14.	38.	16,00	M
	(e) Colla's Comet SP..	14,1	33,3	52,5	11,9	31,2	50,9	18.	1.	10,4	0.	12,04	11,89			18.	0.	53,49	M
	(f) β Lyræ.....	54,9	11,5	27,4	43,4	59,6	15,7	18.	44.	31,6	43.	43,45	43,07	41,57		18.	44.	24,72	M
	(f) ζ Aquilæ.....	57,4	11,3	25,2	39,1	52,9	6,8	18.	58.	20,9	57.	39,09	38,72	41,77		18.	58.	20,39	M
June 11	Spica.....	41,5	55,1	8,6	22,4	36,1	49,7	13.	17.	3,5	16.	22,42	22,09	42,97	1,82	13.	17.	5,15	M
	(c) Arcturus.....	12,8	27,2	40,9	55,8	10,0	24,4	14.	8.	38,8	7.	55,70	55,32	43,13		14.	8.	38,44	M
	ϵ Bootis.....	47,5	2,7	17,9	33,2	48,1	3,7	14.	38.	18,5	37.	33,09	32,72	43,26		14.	38.	15,88	M
	Piazzi XVII. 64..	17,9	33,2	48,5	3,9	19,4	34,9	17.	12.	50,4	12.	4,04	3,67			17.	12.	47,02	M
	(g) α Ophiuchi.....	23,6	37,4	50,9	5,0	18,9	32,8	17.	27.	46,5	27.	5,01	4,64	43,26		17.	27.	48,02	M
	58 Ophiuchi.....	46,5	0,8	15,0	29,9	44,5	58,9	17.	34.	13,2	33.	29,83	29,51			17.	34.	12,90	M
	* N.P.D. 48°. 16'.	7,8	26,2	43,5	1,9	20,3	37,6	17.	46.	55,9	46.	1,89	1,48			17.	46.	44,88	M
	(h) Colla's Comet SP..	39,5	58,8	18,0	37,2	56,4	15,5	18.	20.	34,8	19.	37,17	37,00			18.	20.	20,44	M
	(b) β Lyræ.....	53,3	9,1	24,9	41,8	57,5	13,7	18.	44.	29,8	43.	41,45	41,07	43,59		18.	44.	24,54	M
	ϵ Bootis.....	45,7	0,9	16,0	31,5	46,7	1,8	14.	38.	16,9	37.	31,36	30,99	44,98		14.	38.	15,99	M
	(i) α Herculis.....	11,5	25,8	39,7	53,5	7,6	21,5	17.	7.	35,3	6.	53,57	53,20	45,11		17.	7.	38,38	M
June 12	(k) α Ophiuchi.....	21,8	35,6	48,9	3,4	16,7	30,0	17.	27.	44,4	27.	2,98	2,61	45,30		17.	27.	47,82	M
	58 Ophiuchi.....	44,6	59,0	13,4	27,9	42,8	57,0	17.	34.	11,5	33.	28,03	27,71			17.	34.	12,93	M
	(l) Colla's Comet SP..	29,5	49,2	8,0	27,1	45,5	3,9	18.	38.	22,4	37.	26,51	26,34			18.	38.	11,64	M
	(k) β Lyræ.....	51,7	7,8	23,7	39,8	55,8	11,3	18.	44.	27,9	43.	39,72	39,34	45,33		18.	44.	24,65	M
	Arcturus.....	9,1	23,5	37,2	52,1	6,4	20,8	14.	8.	35,1	7.	52,04	51,66	46,77	1,84	14.	8.	38,38	M
June 13	(m) η Libræ.....	56,8	11,4	24,8	39,3	52,9	7,0	15.	35.	20,9	34.	39,02	38,70			15.	35.	25,53	M
	(n) * N.P.D. 30°. 14'.	28,5	54,9	21,8	49,1	15,9	42,4	16.	47.	9,5	45.	48,87	48,40			16.	46.	35,32	M
	(g) α Ophiuchi.....	19,8	34,0	47,4	1,5	14,9	28,8	17.	27.	42,8	27.	1,32	0,95	46,96		17.	27.	47,93	M
	β Lyræ.....	49,8	6,0	21,6	37,9	54,0	10,1	18.	44.	25,8	43.	37,89	37,51	47,18		18.	44.	24,58	M
	(o) Colla's Comet SP..	38,7	57,6	15,9	34,5	53,3	12,0	18.	54.	30,6	53.	34,66	34,48			18.	54.	21,57	M
	(p) ζ Aquilæ.....	....	....	19,7	33,9	48,2	1,7	18.	58.	15,5	57.	33,95	33,58	46,96		18.	58.	20,68	M
	(g) β Lyræ.....	47,8	3,8	19,5	36,0	51,9	8,6	18.	44.	24,1	43.	35,96	35,58	49,12	1,96				M
June 16	(g) Arcturus.....	3,4	17,8	31,9	46,6	0,5	14,9	14.	8.	29,6	7.	46,39	46,01	52,40	1,72				M
	ϵ Bootis.....	38,5	53,3	8,5	23,9	39,0	54,3	14.	38.	9,4	37.	23,85	23,48	52,46					M
June 18	(g) ϵ Bootis.....	34,9	49,8	5,2	20,7	35,7	50,9	14.	38.	6,0	37.	20,46	20,09	55,84	1,60	14.	38.	15,77	M
	(g) α Ophiuchi.....	10,9	25,1	38,4	52,5	6,3	19,9	17.	27.	33,8	26.	52,42	52,04	55,91		17.	27.	47,91	M
	(b) B.A.C. 6074.....	30,6	45,9	1,4	17,1	32,6	48,2	17.	49.	3,8	48.	17,09	16,77			17.	49.	12,67	M
	τ Ophiuchi.....	6,9	20,0	33,1	46,9	0,5	13,9	17.	54.	27,7	53.	47,00	46,66			17.	54.	42,57	M
	70 Ophiuchi.....	4,5	18,3	31,9	45,6	59,0	12,4	17.	57.	25,9	56.	45,37	45,01			17.	57.	40,92	M
	μ^1 Sagittarii.....	54,9	9,1	23,8	38,3	52,9	7,3	18.	4.	21,7	3.	38,29	37,98	55,82		18.	4.	33,89	M
	(q) β Lyræ.....	40,9	57,0	12,9	29,3	45,5	1,7	18.	44.	17,6	43.	29,28	28,90	55,86		18.	44.	24,86	M
June 19	(r) ϵ Bootis.....	....	48,9	3,7	18,9	34,1	49,5	14.	38.	4,9	37.	18,91	18,54	57,38	1,61	14.	38.	15,82	M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = - 0",85. LEVEL Error = - 2",05. From June 7 = - 2",91. From June 16 = - 2",95. AZIMUTH Error = - 1",94. From June 7 = - 2",85.

(a) High wind. (b) Motion. (c) Blazing. Field not illuminated. (d) Flickering. (e) Faint, but on the whole easy to observe. (f) Observer fatigued. (g) Indefinite. (h) Somewhat brighter than on the preceding night. (i) Eye-glass not in adjustment. (k) Confused. The observer felt unwell. (l) Very faint. (m) At times scarcely seen. (n) A fainter preceded about 2". (o) Considerably brighter than on June 12. (p) Cloud. (q) Bad definition and unsteadiness. (r) Hurried.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
June 19	(a) α Coronæ Borealis.	28,1	43,5	58,1	13,8	29,0	43,9	15.	27.	59,0	27.	13,64	13,27	57,35	1,61	15.	28.	10,61	M
	γ Coronæ Borealis.	34,9	50,1	5,0	20,2	35,1	50,3	15.	36.	5,6	35.	20,18	19,81			15.	36.	17,16	M
	(a) α Ophiuchi	9,5	23,6	37,0	50,9	4,9	18,6	17.	27.	32,4	26.	50,99	50,61	57,35		17.	27.	48,08	M
June 20	(b) Σ 1942.....	31,7	46,5	1,0	15,1	29,7	44,2	15.	18.	58,8	18.	15,29	14,91		1,44	15.	19.	13,88	M
	(c) α Coronæ Borealis.	26,6	41,8	56,6	11,9	27,1	42,4	15.	27.	57,6	27.	12,01	11,64	58,98		15.	36.	17,24	M
	(d) γ Coronæ Borealis.	33,1	48,4	3,5	18,7	33,9	48,8	15.	36.	3,9	35.	18,62	18,25			16.	5.	3,49	M
	(e) Σ 2017.....	23,0	36,9	51,0	4,9	18,7	32,9	16.	4.	46,5	4.	4,84	4,47						M
June 21	(f) Procyon.....	32,4	45,8	59,3	12,9	26,3	40,0	7.	30.	53,5	30.	12,89	12,52	59,72	1,51	7.	31.	12,34	M
	(f) Pollux.....	5,2	20,5	35,9	51,0	6,5	21,9	7.	35.	37,0	34.	51,15	50,78	59,88		7.	35.	50,61	M
	Arcturus.....	55,3	9,9	24,0	38,5	52,9	7,0	14.	8.	21,5	7.	38,45	38,07	60,29		14.	8.	38,31	M
June 24	(g) ϵ Bootis.....	25,7	41,0	56,0	11,2	26,4	41,7	14.	37.	57,0	37.	11,29	10,89	64,98	1,50				G
	(g) α^2 Libræ.....	....	....	....	17,5	31,7	45,6	14.	41.	59,4	41.	17,57	17,25	65,05					G
June 26	(h) Arcturus.....	47,7	2,2	15,9	30,8	45,5	59,5	14.	8.	13,6	7.	30,75	30,35	67,96	1,42	14.	8.	38,25	M
	α Coronæ Borealis.	17,6	32,8	47,9	3,2	17,9	33,0	15.	27.	48,6	27.	3,01	2,62	67,95		15.	28.	10,60	M
	B.A.C. 5918.....	23,4	49,4	14,8	41,1	6,9	32,9	17.	23.	59,0	22.	41,08	40,57			17.	23.	48,68	M
	(i) α Ophiuchi.....	....	12,8	....	40,4	54,0	7,8	17.	27.	21,9	26.	40,31	39,92	68,08		17.	27.	48,03	M
June 28	(a) α Serpentis.....	50,7	3,9	17,5	31,0	44,4	58,5	15.	36.	11,9	35.	31,14	30,76	70,75	1,37	15.	36.	41,49	M
	(a) δ Ophiuchi.....	....	....	52,9	6,8	20,4	33,9	16.	5.	47,0	5.	6,71	6,35	70,91		16.	6.	17,11	M
	(k) Antares.....	3,8	18,6	33,5	48,8	3,9	18,8	16.	19.	33,6	18.	48,72	48,40	70,61		16.	19.	59,17	M
	(l) α Ophiuchi.....	....	....	24,0	37,7	51,2	4,9	17.	27.	18,9	26.	37,54	37,15	70,86		17.	27.	47,98	M
July 26	(k) α Ophiuchi.....	15,4	28,8	42,7	56,9	11,0	24,2	17.	27.	....	26.	56,73	56,38	51,58	1,40				M
	(k) α^2 Capricorni.....	....	....	....	....	53,5	7,7	20.	9.	21,4	8.	39,87	39,55	51,70					M
July 27	(k) Rigel.....	32,9	46,6	59,8	13,9	27,5	40,9	5.	6.	54,5	6.	13,74	13,42	53,62	1,47				M
July 28	(k) χ Aquilæ.....	....	....	12,4	26,5	40,1	53,4	19.	35.	7,3	34.	26,20	25,86		1,53	19.	35.	20,40	M
	(m) γ Aquilæ.....	22,1	35,9	49,6	3,2	17,0	30,6	19.	38.	44,1	38.	3,22	2,88	54,38					M
	(m) α Aquilæ.....	41,9	55,7	8,9	22,6	36,4	50,0	19.	43.	3,7	42.	22,75	22,40	54,71					M
	(m) Σ 2596.....	23,3	36,8	50,5	5,3	19,0	32,7	19.	46.	46,4	46.	4,86	4,51			19.	46.	59,06	M
	(m) 16 Vulpeculæ.....	51,9	7,1	21,6	36,8	51,4	6,1	19.	55.	20,7	54.	36,52	36,18			19.	55.	30,74	M
	(n) θ Sagittæ.....	29,0	43,4	57,6	11,9	26,8	40,7	20.	2.	55,0	2.	12,06	11,71			20.	3.	6,28	M
July 29	ϵ Bootis.....	....	49,5	4,6	20,1	34,8	50,5	14.	38.	5,8	37.	19,94	19,60	55,79	1,41	14.	38.	15,37	M
	(o) δ Ursæ Minoris...	8,6	55,3	40,1	30,4	18,8	4,1	18.	32.	44,5	21.	28,83	27,25						
	β Lyræ.....	40,9	57,3	12,9	29,5	45,5	1,7	18.	44.	17,4	43.	29,32	28,97	55,94		18.	44.	24,98	M
	χ Aquilæ.....	43,7	57,1	10,9	25,0	38,5	52,2	19.	35.	5,8	34.	24,74	24,40			19.	35.	20,46	M
	(p) γ Aquilæ.....	20,6	34,5	47,7	1,6	15,0	28,9	19.	38.	42,6	38.	1,56	1,22	56,06		19.	38.	57,28	M
	α Aquilæ.....	3,1	16,8	30,6	44,5	58,0	11,6	19.	43.	25,1	42.	44,24	43,89			19.	43.	39,96	M
	Piazzi XIX. 307..	....	....	47,2	0,4	13,9	27,6	19.	44.	41,8	44.	0,51	0,16			19.	44.	56,23	M
	Σ 2596.....	....	35,8	49,3	3,6	17,4	31,4	19.	46.	45,0	46.	3,45	3,10			19.	46.	59,17	M
	16 Vulpeculæ.....	50,5	5,4	19,9	34,8	48,9	4,4	19.	55.	19,1	54.	34,72	34,38			19.	55.	30,46	M
	α^2 Capricorni.....	54,1	7,9	21,6	35,5	49,1	3,0	20.	9.	16,8	8.	35,43	35,11	56,17		20.	9.	31,20	M
	(q) Σ 2676.....	43,4	58,5	13,5	28,8	43,7	58,9	20.	16.	14,0	15.	28,69	28,34			20.	16.	24,44	M
	(r) Piazzi XX. 177..	14,9	28,9	42,0	55,9	9,9	23,7	20.	23.	37,4	22.	56,10	55,76			20.	23.	51,87	M
July 30	(s) θ Sagittæ.....	26,6	40,9	55,0	9,6	23,9	38,3	20.	2.	52,5	2.	9,55	9,21		1,24	20.	3.	6,41	M
	α^2 Capricorni.....	52,9	6,8	20,5	34,5	47,9	1,9	20.	9.	15,8	8.	34,33	34,04	57,25					
	(q) Σ 2676.....	42,5	57,5	12,3	27,6	42,5	57,7	20.	16.	12,9	15.	27,57	27,24			20.	16.	24,45	M
	Piazzi XX. 177..	13,9	27,6	40,9	54,9	8,6	22,2	20.	23.	35,9	22.	54,86	54,53			20.	23.	51,75	M
	(t) Σ 2698. s.....	36,8	52,6	7,4	22,2	37,9	52,8	20.	27.	8,1	26.	22,55	22,22			20.	27.	19,44	M
	(u) Σ 2701.....	....	....	....	....	56,6	10,2	20.	29.	24,3	28.	42,87	42,55			20.	29.	39,77	M
	(x) 2 Equulei.....	0,4	13,9	26,9	41,0	54,3	7,8	20.	54.	21,5	53.	40,84	40,52			20.	54.	37,76	M
	(y) Σ 2749.....	23,5	36,8	50,0	3,9	17,3	30,8	20.	56.	44,4	56.	3,81	3,50			20.	57.	0,74	M
	61 Cygni. p.....	12,9	30,1	46,9	4,5	21,7	38,5	20.	59.	55,6	59.	4,31	3,95			21.	0.	1,19	M
	δ Equulei.....	21,9	35,5	48,9	2,8	16,5	30,1	21.	6.	43,8	6.	2,79	2,46			21.	6.	59,71	M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = $-0''.85$. From July 26 = $-0''.43$. LEVEL Error = $-2''.95$. From June 24 = $-3''.26$. From July 26 = $-2''.96$. AZIMUTH Error = $-2''.85$. From July 26 = $-2''.99$. From July 30 = $-2''.59$. July 19, 4^h. Hardy was put forward 1^m.

(a) Indefinite. (b) Faint from day-light. (c) Wire III doubtful. (d) Observed as single. (e) A much fainter preceded. (f) Unsteady. (g) Taken by Mr John Glaisher on a visit at the Observatory. (h) Eye-glass out of adjustment. (i) Hurried: it has been deducted. (k) Clouded. (l) The Transit observations were suspended, Mr Morgan being absent on vacation. (m) Hazy and faint. (n) This star south-precedes the double star. (o) Wire V doubtful. (p) Through thin cloud. (q) Two northward of this. (r) 'The preceding of two.' B.A.C. 7079, which is P. XX. 178, is nearly 2^s in defect. (s) 'The first of three.' The noted times have been corrected by +1^s for error of counting. (t) Called α p, probably by mistake: see Aug. 8. (u) A smaller of nearly the same N.P.D. precedes. (x) Observed as single. (y) One considerably fainter south-follows.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
July 30	Σ 2786.....	30,8	44,1	57,8	11,6	25,4	38,9	21. 11. 52,6	11. 11,61	11,28			21. 12. 8,53	M
	β Aquarii.....	50,1	3,6	16,8	30,9	44,4	57,9	21. 23. 11,5	22. 30,75	30,46	57,30	1,24		M
July 31	(a) η Draconis.....	32,5	0,9	29,1	58,2	26,6	55,1	16. 22. 23,6	20. 58,00	57,57		1,34	16. 21. 55,93	M
	(b) Σ 2120.....	56,0	11,3	26,5	42,0	57,6	12,6	16. 58. 27,5	57. 41,94	41,61			16. 58. 40,00	M
	η Ophiuchi.....	53,6	7,5	21,1	35,3	49,4	3,3	17. 1. 16,9	0. 35,30	35,02			17. 1. 33,41	M
	α Herculis.....	58,4	12,5	25,9	40,1	54,0	7,9	17. 7. 21,9	6. 40,11	39,78	58,45		17. 7. 38,17	M
	(c) Σ 2147.....			20,5	35,9	51,0	6,7	17. 11. 22,0	10. 35,81	35,47			17. 11. 33,87	M
	(d) * N.P.D. 31°. 19'.	55,9	21,9	47,6	13,8	39,9	5,5	17. 17. 31,7	16. 13,77	13,38			17. 17. 11,78	M
	(e) B.A.C. 6074.....	27,9	43,5	58,9	15,0	30,5	45,8	17. 49. 1,6	48. 14,74	14,48			17. 49. 12,91	M
	τ Ophiuchi.....	3,6	17,1	30,6	44,7	58,1	11,6	17. 54. 24,9	53. 44,37	44,08			17. 54. 42,52	M
	70 Ophiuchi.....	1,6	15,9	28,9	43,0	56,5	9,9	17. 57. 23,5	56. 42,76	42,45			17. 57. 40,89	M
	μ ¹ Sagittarii.....	52,6	6,9	21,4	35,9	50,3	4,8	18. 4. 19,1	3. 35,86	35,59	58,40		18. 4. 34,04	M
	δ Ursæ Minoris...	4,4	52,5	36,6	27,9	13,5	0,5	18. 32. 47,1	21. 26,07	24,23				M
	β Lyrae.....	38,5	54,5	10,3	26,8	42,9	59,1	18. 44. 15,0	43. 26,73	26,39	58,51		18. 44. 24,87	M
	ζ Aquilæ.....	41,0	54,9	8,8	22,9	36,8	50,5	18. 58. 4,4	57. 22,77	22,44	58,49		18. 58. 20,94	M
Aug. 1	(f) Σ 2120.....					55,8	10,9	16. 58. 26,5	57. 40,46	40,13		1,40	16. 58. 39,89	M
	(g) 38 Ophiuchi.....				6,5	21,9	36,5	17. 7. 51,9	7. 6,61	6,35			17. 8. 6,12	M
	(f) Piazzi XVII. 64..					2,5	18,4	17. 12. 33,6	11. 47,36	47,02			17. 12. 46,79	M
	(f) α Ophiuchi.....	6,9	21,0	34,6	48,2	2,5	16,1	17. 27. 29,8	26. 48,45	48,12	59,79			M
	τ Ophiuchi.....	2,4	15,9	29,5	42,9	56,6	10,2	17. 54. 23,9	53. 43,07	42,78			17. 54. 42,59	M
	(h) 70 Ophiuchi. np..	0,6	14,7	27,9	41,6	54,8	8,6	17. 57. 21,9	56. 41,45	41,14			17. 57. 40,95	M
	(i) * N.P.D. 68°. 34'.					33,2	47,8	17. 59. 2,5	58. 18,88	18,54			17. 59. 18,36	M
	(f) β Lyrae.....	37,4	53,1	9,4		41,6	57,1	18. 44. 13,5	43. 25,36	25,02	59,87			M
	(f) 16 Vulpeculæ....	46,7	1,8	15,8	31,0	45,9	0,8	19. 55. 15,6	54. 31,09	30,76			19. 55. 30,69	M
Aug. 4	(k) α Herculis.....	52,9	7,3	20,6	34,5	48,5	1,8	17. 7. 15,9	6. 34,50	34,14	64,04	1,50	17. 7. 38,17	M
	(l) * N.P.D. 31°. 19'.		16,5	41,9	8,1	33,9	59,8	17. 17. 25,5	16. 7,98	7,57			17. 17. 11,60	M
	B.A.C. 5918.....	26,5	52,4	18,1	44,5	10,8	36,7	17. 24. 2,6	22. 44,51	44,10			17. 23. 48,16	M
	α Ophiuchi.....	2,8	16,9	30,1	44,5	58,0	11,9	17. 27. 25,4	26. 44,23	43,86	64,02		17. 27. 47,92	M
	(m) Σ ₂ 341.....	22,4	37,1	51,6	6,4	20,8	35,1	17. 58. 49,6	58. 6,14	5,77			17. 59. 9,86	M
	(n) δ Ursæ Minoris...	57,2	45,2	28,6	18,7		53,6	18. 32. 42,4	21. 18,93	17,63				M
	α Aquilæ.....	32,6	46,2	59,7	13,5	26,9	40,6	19. 42. 54,1	42. 13,38	13,02	64,10		19. 43. 17,22	M
	β Aquilæ.....	1,6	14,8	28,1	41,9	55,5	8,9	19. 47. 22,4	46. 41,89	41,52	64,37		19. 47. 45,73	M
	(o) Σ 2655.....	34,6	49,5	3,8	18,8	32,9	47,3	20. 7. 1,9	6. 18,40	18,03			20. 7. 22,26	M
	(p) Σ 2662.....	28,7	42,8	55,9	10,1	23,8	37,0	20. 10. 50,9	10. 9,89	9,52			20. 11. 13,75	M
	(q) Σ 2676.....	35,6	50,3	5,5	20,8	35,9	50,6	20. 16. 5,8	15. 20,65	20,29			20. 16. 24,52	M
	(r) Piazzi XX. 177...	6,8	20,5	33,7	48,3	1,9	15,4	20. 23. 29,2	22. 47,97	47,61			20. 23. 51,86	M
	(r) Σ 2698. s.....	29,9	45,5	0,6	15,9	31,1	46,2	20. 27. 1,3	26. 15,79	15,43			20. 27. 19,68	M
	(s) Σ 2701.....				35,8	49,6	3,5	20. 29. 16,9	28. 35,80	35,44			20. 29. 39,69	M
Aug. 5	α Ophiuchi.....	1,5	15,1	28,7	42,5	56,3	10,1	17. 27. 24,6	26. 42,69	42,33	65,54	1,50		M
	(t) 4 Sagittarii.....	34,8	49,9	4,1	18,9	33,9	48,2	17. 50. 3,4	49. 19,03	18,71			17. 50. 24,30	M
	(u) * N.P.D. 68°. 34'.	29,9	44,6	58,7	13,4	27,8	41,9	17. 58. 56,5	58. 13,26	12,88			17. 59. 18,48	M
	(f) δ Ursæ Minoris...	55,2	41,9	28,1	18,5		52,3	18. 32. 38,4	21. 17,05	15,83				M
	(f) 51 (Hev.) Ceph. SP.			15,0	56,5	41,2	19,4	18. 34.	24. 57,55	58,40				M
	(f) β Lyrae.....	31,1	47,5	3,4	19,6	35,7	51,7	18. 44. 7,8	43. 19,55	19,19	65,67			M
	(f) χ Aquilæ.....				14,8	28,5	42,1	19. 34. 55,9	34. 14,69	14,33			19. 35. 20,03	M
Aug. 6	(f) β Lyrae.....	29,9	46,0	1,9	18,2	34,4	50,0	18. 44. 6,1	43. 18,07	17,71	67,14	1,39	18. 44. 24,85	M
	(x) γ Aquilæ.....	9,5	23,1	36,7	50,5	4,2	17,8	19. 38. 31,6	37. 50,49	50,14	67,13		19. 38. 57,34	M
	α Aquilæ.....	29,6	43,2	56,1	10,4	23,8	37,5	19. 42. 51,1	42. 10,25	9,89	67,23		19. 43. 17,09	M
	Σ 2596.....	10,5	24,6	38,7	52,4	6,3	20,0	19. 46. 33,9	45. 52,35	51,99			19. 46. 59,20	M
	(o) Σ 2655.....	31,8	46,5	0,6	15,5	29,9	44,5	20. 6. 58,8	6. 15,37	15,00			20. 7. 22,22	M
	(p) Σ 2662.....					20,6	34,5	20. 10. 47,8	10. 6,89	6,53			20. 11. 13,76	M
	Σ 2701.....		5,7	19,8	33,1	46,8	0,6	20. 29. 14,5	28. 33,20	32,84			20. 29. 40,08	M
	2 Equulei. p.....	50,6	3,9	17,1	31,0	44,5	57,6	20. 54. 11,6	53. 30,91	30,54			20. 54. 37,82	M
	(y) Σ 2749.....	13,6	26,9	40,5	53,9	7,7	21,0	20. 56. 34,5	55. 54,01	53,65			20. 57. 0,93	M
	(r) 61 ¹ Cygni.....		20,1	37,0	54,5	11,7	28,7	20. 59. 45,8	58. 54,42	54,04			21. 0. 1,32	M
	(r) β Aquarii.....	39,8	53,6	7,2	21,1	34,6	47,9	21. 23. 1,7	22. 20,85	20,51	67,33		21. 23. 27,81	M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = - 0",43. LEVEL Error = - 2",96. From Aug. 5 = - 2",87. AZINUTH Error = - 2",59. From Aug. 4 = - 3",44.

(a) Tremulous. (b) Hurried and doubtful observation. (c) 'The preceding of two.' (d) 'Appeared of 7,8 mag.' (e) Unsteady and misty. (f) Cloudy. (g) Faint: 4^s have been added. (h) Unsteady. (i) Another south-precursor. (k) Taken without illumination of the field, and somewhat doubtfully. (l) Disturbance: 2^s have been added for error of counting. (m) The south-precursor of two. (n) Very faint. Wire II taken by B. (o) 'The componenta have the same R.A.' (p) Preceded by 10^s a faint star of less N.P.D. (q) Southward of two near each other. (r) Corrected by +1^s for error of counting. (s) Appeared double; taken as single. (t) Flickering: difficult to observe. (u) The star following Σ₂ 341. (x) Wires VI and VII have been corrected by +1^s. (y) Corrected by +1^s: see July 30 and Aug. 7. This star precedes a much smaller.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Aug. 7	(a) β Lyræ.....	28,4	44,6	0,5	16,8	32,8	48,9	18.44.	4,9		43.16,70		16,40	68,44	1,30	18.44.	24,84		M
	ζ Aquilæ.....	30,9	45,2	58,9	12,9	26,8	40,5	18.57.	53,8		57.12,72		12,44	68,46		18.58.	20,88		M
	ρ^1 Sagittarii.....	54,4	8,6	22,8	37,1	51,5	5,6	19.12.	19,6		11.37,09		36,90			19.12.	45,36		M
	Σ 2577.....	46,1	0,6	14,8	29,1	43,9	57,9	19.39.	12,6		38.29,29		29,00			19.39.	37,48		M
	Piazzì XIX. 307..	6,9	20,5	34,1	47,9	1,6	15,3	19.44.	28,8		43.47,87		47,61			19.44.	56,10		M
	β Aquilæ.....	56,7	10,6	23,8	37,8	51,4	4,9	19.47.	18,5		46.37,67		37,42	68,47		19.47.	45,91		M
	(b) B.A.C. 6896.....	10,8	24,7	38,6	53,1	6,8	21,1	19.56.	34,9		55.52,87		52,60			19.57.	1,10		M
	(c) Σ 2655.....	30,7	45,1	59,8	14,4	28,8	43,2	20.6.	57,5		6.14,22		13,93			20.7.	22,44		M
	(d) Σ 2662.....	24,6	38,3	51,9	5,5	19,4	32,8	20.10.	46,5		10.5,57		5,30			20.11.	13,81		M
	2 Equulei.....	49,4	2,9	16,0	30,1	43,4	56,8	20.54.	10,3		53.29,85		29,59			20.54.	38,15		M
	(c) Σ 2749.....	11,8	25,9	39,4	52,8	6,3	19,7	20.56.	32,9		55.52,69		52,44			20.57.	1,00		M
	61 ¹ Cygni.....	1,8	18,7	35,9	53,1	10,3	27,4	20.59.	44,5		58.53,11		52,78			21.0.	1,34		M
	α Ophiuchi.....	56,8	11,1	24,5	38,6	52,5	5,9	17.27.	19,7		26.38,45		38,18	69,66					M
	72 Ophiuchi.....	13,4	26,8	40,5	54,4	7,9	21,6	17.59.	35,9		58.54,36		54,07			18.0.	3,76		M
Aug. 8	(a) δ Ursæ Minoris...	53,1	...	24,3	14,3	6,2	46,4	18.32.	28,7		21.13,24		10,67						M
	(a) 51 (Hev.) Ceph.SP.	...	27,7	9,4	51,5	36,2	13,6	18.38.	57,4		24.52,02		54,80						M
	(f) α^2 Capricorni.....	40,5	54,0	7,9	21,8	35,5	49,3	20.9.	2,9		8.21,71		21,51	69,82					M
	Σ 2698. sf.	24,6	39,5	54,4	9,7	25,3	40,4	20.26.	55,6		26.9,93		9,64			20.27.	19,47		M
Aug. 15	(g) 4 Sagittarii.....	21,8	36,4	50,9	6,1	20,6	35,2	17.50.	50,1		50.5,87		5,71		1,19	17.50.	24,25		M
	72 Ophiuchi.....	...	...	...	...	59,2	12,4	18.0.	26,5		59.45,37		45,12			18.0.	3,67		M
	(g) ρ^1 Sagittarii.....	44,5	58,6	12,5	26,9	41,1	55,2	19.13.	9,5		12.26,90		26,72			19.12.	45,33		M
	(h) H. C. 37589.....	29,3	43,4	57,6	11,9	26,7	40,9	19.38.	55,1		38.12,14		11,87			19.38.	30,50		M
	α Aquilæ.....	40,8	54,4	7,9	21,9	35,4	48,8	19.44.	3,0		43.21,75		21,50			19.43.	40,14		M
	(g) β Aquilæ.....	46,6	0,5	13,6	27,6	41,4	54,7	19.48.	7,9		47.27,47		27,23	18,64					M
Aug. 20	Σ 2621. sp.	10,8	24,9	38,4	51,9	5,5	19,4	19.57.	32,5		56.51,92		51,67			19.57.	10,32		M
	(i) α Ophiuchi.....	42,2	56,1	9,6	23,5	37,8	51,5	17.28.	5,3		27.23,72		23,43	24,24	1,20	17.27.	47,63		M
	β Lyræ.....	12,5	28,6	44,4	0,5	16,6	32,8	18.44.	48,8		44.0,61		0,31	24,36		18.44.	24,58		M
	Piazzì XIX. 307..	51,1	4,9	18,4	32,5	45,9	59,6	19.45.	13,1		44.32,22		31,94			19.44.	56,26		M
	(k) β Aquilæ.....	41,3	54,3	8,0	21,9	35,6	48,9	19.48.	2,5		47.21,79		21,52	24,33		19.47.	45,84		M
	(k) Σ 2621. sp.	5,3	18,8	32,5	46,1	59,5	13,6	19.57.	27,0		56.46,11		45,83			19.57.	10,16		M
	(l) Σ 2698.....	9,8	25,4	40,5	55,7	10,8	25,5	20.27.	41,1		26.55,54		55,25			20.27.	19,60		M
	(c) Σ 2786.....	4,1	17,6	31,1	44,8	58,4	11,9	21.12.	25,7		11.44,80		44,52			21.12.	8,91		M
	β Aquarii.....	23,5	36,7	50,3	3,9	17,4	30,9	21.23.	44,5		23.3,89		3,65	24,28		21.23.	28,05		M
	Σ 2847.....	3,6	17,0	30,5	43,9	57,9	11,1	21.50.	24,5		49.44,07		43,81			21.50.	8,23		M
Aug. 21	(m) Sirius.....	12,5	27,0	40,8	55,1	9,3	22,8	6.38.	37,1		37.54,94		54,71	26,09	1,34	6.38.	20,73		M
Aug. 22	(n) μ^1 Sagittarii.....	23,9	38,6	53,0	7,6	21,9	36,3	18.4.	50,8		4.7,45		7,23	26,56		18.4.	33,89		M
	(o) Groombridge 2614	...	33,9	55,6	17,4	39,0	0,2	18.31.	21,5		30.17,23		16,87			18.30.	43,56		M
	B.A.C. 6428.....	...	...	...	47,6	7,8	27,9	18.44.	48,4		43.47,34		47,00			18.44.	13,70		M
	Σ 2500.....	33,9	48,4	2,5	16,8	31,0	45,1	19.12.	59,2		12.16,70		16,40			19.12.	43,12		M
	(p) Σ 2577.....	27,4	41,8	56,4	10,9	25,2	39,6	19.39.	53,9		39.10,75		10,45			19.39.	37,20		M
	(q) α Aquilæ.....	9,8	23,4	36,5	50,8	3,9	17,9	19.43.	31,1		42.50,49		50,20	26,86		19.43.	16,95		M
	β Aquilæ.....	38,8	52,5	5,5	19,4	32,8	46,4	19.48.	0,0		47.19,35		19,07	26,77		19.47.	45,83		M
	(r) Σ 2620.....	45,7	59,5	12,9	27,0	40,7	54,4	19.57.	7,9		56.26,87		26,58			19.56.	53,34		M
	(s) δ Equulei.....	52,5	5,8	19,7	33,4	47,0	0,5	21.7.	14,4		6.33,34		33,05			21.6.	59,88		M
	(a) β Aquarii.....	20,7	34,5	47,7	1,5	15,1	28,4	21.23.	42,0		23.1,42		1,17	26,76		21.23.	28,02		M
Aug. 23	(a) α^2 Capricorni.....	21,9	36,0	49,1	3,3	17,1	30,8	20.9.	44,8		9.3,29		3,05	28,25	1,46				M
Aug. 26	δ Ursæ Minoris...	22,1	9,4	53,9	45,6	33,6	...	18.25.	...		21.44,11		42,07		1,47				M
	51 (Hev.) Ceph.SP.	35,5	16,1	55,1	...	...	58,7	18.39.	41,2		25.37,82		39,90						M
	(t) Groombridge 2614	...	28,5	50,3	12,0	33,5	54,8	18.31.	16,5		30.11,90		11,54			18.30.	43,76		M
	β Lyræ.....	4,4	20,4	36,3	52,5	8,7	24,8	18.44.	40,9		43.52,58		52,27	32,31		18.44.	24,51		M
	β Aquilæ.....	33,1	46,7	0,2	13,8	27,5	40,8	19.47.	54,1		47.13,74		13,46	32,35		19.47.	45,76		M
	(u) Σ 2767.....	13,8	27,9	42,0	57,0	10,9	25,4	21.3.	39,0		2.56,57		56,27			21.3.	28,64		M
	(x) δ Equulei.....	46,9	0,5	14,1	27,8	41,5	55,0	21.7.	8,7		6.27,79		27,50			21.6.	59,89		M
	(y) Σ 2786.....	55,7	9,4	22,9	36,6	50,5	3,9	21.12.	17,6		11.36,66		36,37			21.12.	8,76		M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = $-0''$.43. LEVEL Error = $-2''$.87. From Aug. 15 = $-2''$.63. From Aug. 22 = $-2''$.76. AZIMUTH Error from Aug. 7 = $-1''$.31. From Aug. 20 = $-1''$.97. Aug. 8, 22^h. Hardy was put forward 1^m.

(a) Faint from cloud. (b) A brighter star of less N.P.D. follows. (c) 'The components have the same R.A.' (d) 'A faint star follows about 10^s.' (e) Corrected by $-2''$ for error of counting. (f) Faint from cloud: correction $-1''$ applied for error of counting. (g) Unsteady. (h) 'Precedes a star of less N.P.D. about 1^m.' The following star is Σ 2577. (i) Very misty. (k) Corrected by $+1''$ for error of counting. (l) Very faint: observed as single. (m) Unsteady: correction $+1''$ applied for error of counting. The star had a misty appearance, which was found to be owing to dust and moisture on the object-glass. (n) Waving. (o) Quite alone: about 7,8 mag. (p) A faint companion. (q) Blazing. (r) Extremely faint. This is H. C. 38353, and most probably Σ 2620. (s) Too much haze to see the small star: bad night for observing. (t) Faint from day-light. The last five wires have been corrected by $+10''$ for error of counting. (u) A close double. Correction $+10''$ has been applied for error of counting. (x) Companion seen. (y) Close double. Correction $+1''$ applied for error of counting.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.	
Aug. 26	(a) β Aquarii.....	15,5	28,8	41,9	56,0	9,6	22,7	21.23.36,6	22.55,87	55,62	32,32	1,47	21.23.28,02	M
	(b) α Aquarii.....	41,0	54,5	7,9	21,5	35,0	47,8	21.58.1,5	57.21,32	21,06	32,37		21.57.53,49	M
	(c) Σ 2868.....	54,4	8,6	23,0	37,9	52,5	6,8	22.2.21,5	1.37,82	37,52			22.2.9,96	M
Aug. 27	Groombridge 2614	6,4	27,9	48,7	10,6	32,5	53,3	18.31.14,5	30.10,56	10,20		1,42	18.30.43,89	M
	B.A.C. 6423.....	39,1	59,6	19,5	40,0	0,6	20,3	18.44.41,5	43.40,09	39,75			18.44.13,46	M
	(a) ζ Aquilæ.....	5,9	19,7	33,5	47,4	1,3	13,9	18.58.29,0	57.47,24	46,95	33,76		18.58.20,67	M
	(d) B.A.C. 6590.....	58,6	12,5	26,4	40,4	54,3	8,4	19.10.22,2	9.40,41	40,18			19.10.13,91	M
	(e) * N.P.D. 110°. 56'.	17,5	31,8	46,0	0,8	15,5	29,6	19.13.44,0	13.0,75	0,52			19.13.34,26	M
	(d) γ Aquilæ.....	42,5	56,5	9,9	23,9	37,4	50,8	19.39.4,8	38.23,69	23,40	33,76		19.38.57,16	M
	(b) α Aquilæ.....	2,8	16,3	30,1	43,5	57,2	10,8	19.43.24,4	42.43,59	43,30	33,72		19.43.17,07	M
	(f) β Aquilæ.....	31,8	45,1	58,8	12,4	26,0	39,1	19.47.52,8	47.12,29	12,01	33,79		19.47.45,79	M
	(g) Σ 2621.....	56,4	9,8	23,1	37,4	50,5	4,4	19.57.17,5	56.37,02	36,73			19.57.10,38	M
Aug. 29	Groombridge 2614	3,4	24,8	45,9	7,8	29,1	....	18.30.	30.7,60	7,28		1,33	18.30.43,57	M
	Σ 2500.....	24,2	38,4	52,5	6,9	21,0	35,3	19.12.50,0	12.6,90	6,62			19.12.42,95	M
	(f) α Aquilæ.....	59,7	13,8	26,8	41,0	54,6	8,3	19.43.21,7	42.40,85	40,59	36,41		19.43.16,95	M
	(f) β Aquilæ.....	29,4	42,7	56,0	10,0	23,3	36,8	19.47.50,4	47.9,81	9,55	36,24		19.47.45,91	M
	(h) Σ 2767.....	9,9	24,4	38,1	52,8	7,0	21,4	21.3.35,2	2.52,69	52,41			21.3.28,84	M
	(i) Σ 430.....	....	....	....	27,8	43,0	57,6	21.5.12,1	4.28,06	27,79			21.5.4,23	M
	β Aquarii.....	10,9	24,6	38,0	51,9	5,0	18,8	21.23.32,4	22.51,66	51,43	36,51		21.23.27,89	M
	(c) Σ 2847.....	51,6	5,1	18,5	32,1	45,6	59,1	21.50.12,5	49.32,08	31,83			21.50.8,31	M
Aug. 30	B.A.C. 6428.....	35,0	55,6	15,4	36,2	56,8	17,2	18.44.36,9	43.36,16	35,86			18.44.13,50	M
Sept. 3	(f) β Aquarii.....	3,9	17,7	31,0	44,6	58,2	11,8	21.23.25,3	22.44,64	44,47	43,46	1,20		M
	(e) Σ 2847.....	44,7	57,9	11,4	25,1	38,6	51,9	21.50.5,6	49.25,03	24,85			21.50.8,43	M
	(e) Σ 2869.....	29,7	43,5	57,0	11,6	25,5	39,1	22.2.52,9	2.11,33	11,11			22.2.54,70	M
	(e) Σ 471.....	9,5	22,8	36,5	49,8	3,5	16,9	22.21.30,8	20.49,98	49,77			22.21.33,38	M
	(k) B. xxii. 741.....	7,8	21,9	54,8	48,6	1,9	15,6	22.34.28,9	33.48,50	48,31			22.34.31,93	M
	(l) α Pegasi.....	41,5	55,5	9,3	23,5	37,4	51,3	22.57.4,9	56.23,35	23,13	43,74			M
Sept. 4	(m) α Aquilæ.....	51,6	5,2	18,7	32,5	45,9	59,8	19.43.13,2	42.32,42	32,21	44,72		19.43.16,86	M
	(m) β Aquilæ.....	20,6	34,5	47,8	1,5	14,8	28,6	19.47.41,9	47.1,39	1,18	44,54		19.47.45,83	M
	(n) Σ 430.....	35,7	50,5	4,8	20,1	34,5	50,5	21.5.3,9	4.20,01	19,78			21.5.4,49	M
	(n) Σ 2849.....	2,4	16,5	30,6	44,9	58,9	13,1	21.50.27,0	49.44,77	44,54			21.50.29,29	M
	(o) α Aquarii.....	28,5	....	55,1	9,0	22,2	35,8	21.57.49,4	57.8,85	8,67	44,78		21.57.53,42	M
Sept. 6	B.A.C. 6590.....	44,9	59,3	13,0	26,9	41,0	54,8	19.10.9,1	9.27,00	26,86		1,26	19.10.13,97	M
	(p) * N.P.D. 110°. 56'.	3,9	18,4	32,7	47,5	1,9	15,9	19.13.30,5	12.47,26	47,12			19.13.34,24	M
	(m) α Aquilæ.....	49,1	2,6	16,3	29,8	43,4	57,2	19.43.10,9	42.29,90	29,68	47,23		19.43.16,83	M
	(m) β Aquilæ.....	18,3	31,7	45,0	58,8	12,5	25,9	19.47.39,5	46.58,82	58,61	47,09		19.47.45,76	M
	15 Sagittæ.....	42,8	56,9	11,0	25,2	39,1	53,3	19.57.7,4	56.25,10	24,87			19.57.12,02	M
	Σ 2767.....	58,7	13,4	27,4	42,0	56,0	10,6	21.3.24,7	2.41,84	41,61			21.3.28,82	M
	α Aquarii.....	25,9	39,5	52,6	6,8	20,0	33,0	21.57.46,9	57.6,39	6,20	47,25		21.57.53,46	M
	(q) Σ 2868.....	39,6	53,9	8,4	22,9	37,5	51,8	22.2.6,4	1.22,94	22,70			22.2.9,96	M
	(r) Σ 2904. sf.....	47,2	0,4	13,7	27,5	41,3	54,6	22.19.7,9	18.27,52	27,34			22.19.14,62	M
	(s) Σ 471.....	5,3	19,1	32,6	46,5	0,5	13,6	22.21.27,4	20.46,43	46,21			22.21.33,49	M
Sept. 8	(t) δ Ursæ Minoris...	1,4	47,1	32,3	23,3	....	0,3	18.32.43,8	21.22,70	20,24		1,31		M
	(t) 51 (Hev.) Ceph. SP.	24,2	4,5	44,1	25,5	11,3	46,5	18.39.29,7	25.26,54	29,30				M
	β Lyræ.....	46,7	2,8	18,7	34,9	51,0	7,1	18.44.23,4	43.34,94	34,69	49,64		18.44.24,30	M
	B.A.C. 6590.....	42,5	56,5	10,0	24,4	38,6	52,5	19.10.6,6	9.24,44	24,30			19.10.13,93	M
	(u) Σ 2500.....	10,9	25,1	38,8	54,0	7,9	21,8	19.12.36,0	11.53,51	53,28			19.12.42,92	M
	α Aquilæ.....	46,5	0,6	13,8	27,5	....	54,2	19.43.8,2	42.27,41	27,19	49,70		19.43.16,85	M
	Σ 2849.....	56,2	10,9	25,4	39,9	53,7	8,2	21.50.22,8	49.39,59	39,36			21.50.29,14	M
	α Aquarii.....	23,5	36,9	50,4	4,0	17,5	30,9	21.57.44,1	57.3,90	3,71	49,74		21.57.53,49	M
	(x) Σ 2868.....	36,9	51,5	5,9	20,5	35,1	49,6	22.2.3,9	1.20,49	20,25			22.2.10,04	M
	(y) Σ 2904. sf.....	45,2	58,5	12,4	25,6	39,1	52,5	22.19.5,8	18.25,59	25,41			22.19.15,22	M
Σ 471.....	3,4	17,2	30,3	43,9	57,8	11,4	22.21.25,0	20.44,14	43,92			22.21.33,73	M	

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = -0",43. LEVEL Error = -2",76. From Aug. 29 = -2",34. From Sept. 6 = -2",41. AZIMUTH Error = -1",97. From Sept. 3 = -0",80.

(a) Unsteady and indefinite. (b) Radiation. (c) Appeared single. (d) Bad definition. (e) Faint. (f) Radiating and unsteady. (g) Owing to faintness observed as single. Correction -0",13 has been applied to reduce the observation to the preceding star. (h) Observed as single. (i) 'Did not seem double.' Correction -20" applied for error of counting. (k) Very faint. Wires V, VI, and VII have been corrected by +10" for error of counting. (l) Great radiation. Bad night for observing. (m) Radiation and unsteadiness. (n) Faint from haze. (o) Sometimes hid by cloud. (p) Flickering. (q) Very close. (r) 'Rather difficult.' (s) Did not appear double. Correction -1" applied for error of counting. (t) Doubtful observations: disturbed by noise in the court. (u) Faint from moon-light. (x) Seemed double. (y) Very faint.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Sept. 9	B.A.C. 6590.....	41,1	54,9	8,9	23,1	37,0	51,0	19. 10.	4,9		9. 22,99	22,85			1,33	19. 10. 13,81			M
	* N.P.D. 110°. 56'.	0,1	14,9	28,6	43,4	57,9	12,5	19. 13.	26,5		12. 43,42	43,28				19. 13. 34,24			M
	(a) α Aquilæ.....	45,5	59,2	12,6	26,2	39,7	53,4	19. 43.	6,9		42. 26,21	25,99	50,89			19. 43. 16,98			M
	(b) Σ 2622. n.....	36,2	50,9	4,9	19,2	33,4	47,6	19. 57.	1,7		56. 19,13	18,90				19. 57. 9,90			M
	(c) Σ 430.....	....	43,9	58,8	13,6	28,0	42,9	21. 4.	57,6		4. 13,45	13,21				21. 5. 4,28			M
	β Aquarii.....	56,4	9,9	23,4	37,0	50,6	3,9	21. 23.	17,6		22. 36,97	36,80	51,10			21. 23. 27,88			M
	(d) Σ 2849.....	55,7	9,9	23,9	38,7	53,0	6,9	21. 50.	21,5		49. 38,52	38,29				21. 50. 29,39			M
	α Aquarii.....	22,1	35,6	48,9	2,5	15,8	29,4	21. 57.	42,9		57. 2,46	2,27	51,18			21. 57. 53,39			M
	Σ 2869.....	22,0	35,8	40,9	4,0	17,6	31,4	22. 2.	45,2		2. 3,71	3,49				22. 2. 54,61			M
	(e) * N.P.D. 110°. 56'.	56,4	10,5	24,8	39,3	53,8	8,1	19. 13.	22,5		12. 39,35	39,20			1,20	19. 13. 34,17			M
Sept. 12	(f) α Aquilæ.....	40,9	55,1	8,3	21,9	36,0	49,4	19. 43.	2,8		42. 22,06	21,83	55,00			19. 43. 16,83			M
	B.A.C. 6896.....	....	37,6	51,9	6,5	20,3	34,2	19. 56.	48,2		56. 6,09	5,85				19. 57. 0,86			M
	(g) α Pegasi.....	30,3	44,5	57,9	12,1	26,2	40,1	22. 56.	53,6		56. 12,11	11,87	55,04			22. 57. 7,03			M
	B.A.C. 8154. f. ...	11,5	25,8	39,0	53,1	6,3	20,0	23. 15.	33,7		14. 52,78	52,60				23. 15. 47,77			M
	(e) α Andromedæ....	46,6	2,0	17,3	32,8	48,1	3,3	0. 0.	18,6		59. 32,68	32,42	55,33			0. 0. 27,63			M
Sept. 13	(h) ζ Aquilæ.....	42,9	57,0	....	25,0	....	52,4	18. 58.	6,2		57. 24,68	24,44	56,01		1,25				M
	(e) ρ^2 Sagittarii.....	13,8	28,0	41,9	55,9	10,5	24,6	19. 12.	39,1		11. 56,26	56,12				19. 12. 52,25			M
	α Aquilæ.....	40,1	53,6	6,9	20,9	34,2	47,9	19. 43.	1,8		42. 20,78	20,55	56,27						M
Sept. 14	(i) ζ Aquilæ.....	41,9	55,4	8,9	23,3	37,1	50,9	18. 58.	5,0		57. 23,22	22,98	57,46		1,27	18. 58. 20,43			M
	γ Aquilæ.....	19,0	32,6	46,0	0,0	13,3	27,1	19. 38.	40,6		37. 59,81	59,57	57,37			19. 38. 57,06			M
	α^2 Capricorni.....	52,2	6,0	19,9	34,0	47,5	0,9	20. 9.	14,9		8. 33,64	33,47	57,64			20. 9. 30,98			M
Sept. 15	(e) α Andromedæ....	43,5	58,6	13,5	29,0	44,5	59,8	0. 0.	15,0		59. 29,13	28,87	58,90						M
	(g) α Arietis.....	48,7	3,5	17,9	32,9	47,2	1,8	1. 58.	16,2		57. 32,61	32,36	59,00						M
Sept. 17	(k) 72 Ophiuchi.....	21,4	35,1	48,7	2,5	16,1	29,8	17. 59.	43,5		59. 2,45	2,10				18. 0. 3,22			M
	α Aquilæ.....	34,9	48,6	2,1	15,9	29,5	43,1	19. 42.	56,8		42. 15,84	15,50	61,26			19. 43. 16,71			M
	β Aquilæ.....	4,0	17,9	31,0	45,0	58,3	11,9	19. 47.	25,1		46. 44,74	44,40	61,15			19. 47. 45,62			M
	(l) 15 Sagittæ.....	28,8	43,0	56,8	11,0	24,9	38,9	19. 56.	53,5		56. 10,99	10,65				19. 57. 11,87			M
	(m) Σ 2904. sf.	33,1	47,0	0,4	13,8	27,1	40,5	22. 18.	53,8		18. 13,67	13,34				22. 19. 14,70			M
	(m) B. xxii. 741.....	50,6	3,9	17,5	31,0	44,1	57,9	22. 34.	11,4		33. 30,92	30,59				22. 34. 31,96			M
	(n) α Pegasi.....	23,9	38,0	51,9	6,1	19,9	33,7	22. 56.	47,5		56. 5,86	5,51	61,41			22. 57. 6,90			M
	(o) α Aquarii.....	10,7	23,9	37,5	....	4,5	17,9	21. 57.	31,6		56. 51,03	50,70	62,72		1,26				M
Sept. 18	(p) Σ 2869.....	11,0	24,7	38,5	52,4	6,0	19,9	22. 2.	34,0		1. 52,36	52,01				22. 2. 54,71			M
	Σ 8. sf.	59,1	12,9	26,0	39,6	52,9	6,6	0. 3.	20,0		2. 39,59	39,26				0. 3. 42,06			M
	(q) β Ceti.....	7,4	21,5	35,6	50,0	4,0	18,6	0. 35.	32,6		34. 49,96	49,65	62,79						M
	(r) ϕ^3 Ceti.....	35,4	49,0	3,0	17,1	30,7	44,5	0. 47.	58,0		47. 16,82	16,50				0. 48. 19,34			M
	ϕ^1 Ceti.....	18,5	32,0	46,0	59,9	13,6	27,4	0. 50.	41,0		49. 59,78	59,46				0. 51. 2,30			M
	(s) B. o. 962.....	....	4,8	19,0	32,8	46,7	0,1	0. 54.	14,0		53. 32,80	32,48				0. 54. 35,33			M
	28 Ceti.....	39,0	52,9	6,5	20,0	33,8	47,6	0. 58.	1,2		57. 20,15	19,83				0. 58. 22,68			M
	(t) α Andromedæ....	38,5	53,4	8,8	24,1	39,8	55,0	0. 0.	9,9		59. 24,22	23,88	63,93			0. 0. 27,79			M
Sept. 19	72 Ophiuchi.....	18,8	33,0	46,1	59,9	14,0	27,0	17. 59.	40,9		58. 59,96	59,61			1,14	18. 0. 3,24			M
	ζ Aquilæ.....	35,5	49,4	3,1	17,0	30,8	44,6	18. 57.	58,4		57. 16,97	16,62	63,73			18. 58. 20,29			M
	(q) ρ^2 Sagittarii.....	55,9	9,6	24,4	48,8	3,0	17,1	19. 12.	31,5		11. 48,62	48,31				19. 12. 51,99			M
	γ Aquilæ.....	12,4	26,2	39,8	53,7	7,4	21,0	19. 38.	34,5		37. 53,58	53,23	63,63			19. 38. 56,93			M
	(t) α Aquilæ.....	32,6	46,2	59,6	13,5	27,1	40,8	19. 42.	54,3		42. 13,45	13,11	63,62			19. 43. 16,82			M
	(u) Σ 2622. nf.	24,5	38,4	52,4	7,0	20,5	34,9	19. 56.	49,6		56. 6,76	6,42				19. 57. 10,13			M
	B.A.C. 8154. f. ...	3,1	17,0	30,6	44,1	57,8	11,5	23. 15.	25,0		14. 44,16	43,84				23. 15. 47,71			M
	(t) α Andromedæ....	38,5	53,4	8,8	24,1	39,8	55,0	0. 0.	9,9		59. 24,22	23,88	63,93			0. 0. 27,79			M
Sept. 22	(x) β Aquarii.....	40,0	53,9	7,0	21,0	34,1	48,0	21. 23.	1,4		22. 20,78	20,47	67,34		1,08	21. 23. 27,82			M
	(y) ζ Aquarii. np.	7,9	21,0	34,5	47,9	1,8	14,8	22. 20.	28,3		19. 48,03	47,71				22. 20. 55,10			M
	(z) α Pegasi.....	18,1	32,0	45,9	0,0	13,8	27,6	22. 56.	41,3		55. 59,82	59,49	67,43			22. 57. 6,91			M
	(aa) α Andromedæ....	34,7	49,9	5,1	20,5	36,1	51,6	0. 0.	6,6		59. 20,65	20,33	67,49			0. 0. 27,80			M
Sept. 23	(bb) ζ Aquilæ.....	30,8	44,4	57,9	12,5	26,4	39,9	18. 57.	53,9		57. 12,26	11,93	68,35		0,96	18. 58. 20,24			M
	(bb) ρ^2 Sagittarii.....	....	....	29,8	44,1	....	....	19. 12.	26,5		11. 44,02	43,71				19. 12. 52,03			M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = - 0",43. LEVEL Error = - 2",41. From Sept. 12 = - 2",70. From Sept. 22 = - 2",43. AZIMUTH Error = - 0",80. From Sept. 17 = - 3",23.

(a) Good definition. (b) 'Rather faint.' Incorrectly called Piazzì XIX. 392 by Struve. (c) 'Very close.' (d) 'The smaller and south of two.' The other star is II. C. 42336. (e) Unsteadiness. (f) Great radiation. The Telescope was slightly struck during the observation. (g) No defined point. (h) Wires III. and V. which were written down 11,9 and 39,3, have been rejected. (i) Corrected by +1" for error of counting. (k) High wind. (l) Partially clouded at times. (m) In strong moon-light: very faint. (n) Beat of clock indistinct on account of loud wind. (o) Disturbance. Wire III has been corrected by +1". (p) No companion seen. (q) Indistinct. (r) During this and the three following observations the field was badly illumined. (s) Corrected by - 2" for error of counting. (t) Radiation. (u) Faint. (x) Almost hid by cloud. (y) Distinguished as double, but much clouded. (z) Corrected by +1". Very misty. (aa) Appeared of mag. 7, owing to misty cloud. (bb) Very indistinct or unsteady.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Sept. 23	(a) γ Aquilæ.....	7,5	21,6	35,0	48,8	12,5	26,6	19	38	39,9	37	48,85	48,52	68,28	0,96	19	38	56,85	M
	(a) α Aquilæ.....	27,9	41,3	54,8	8,4	22,5	35,8	19	42	49,4	42	8,59	8,26	68,41		19	43	16,60	M
	(a) β Aquilæ.....	56,9	10,5	23,9	37,5	50,9	4,1	19	47	18,4	46	37,46	37,13	68,33		19	47	45,47	M
	(a) 15 Sagittæ.....	21,6	35,5	49,6	4,0	17,9	31,9	19	56	45,7	56	3,75	3,42			19	57	11,77	M
	(a) ζ Aquarii.....	6,7	20,1	33,1	46,9	0,9	14,0	22	20	27,0	19	46,92	46,60			22	20	55,04	M
	(b) B.A.C. 8154. ηf ...	58,5	11,9	25,6	39,4	53,1	6,8	23	15	20,4	14	39,39	39,08			23	15	47,56	M
	(c) α Andromedæ....	33,6	48,8	4,4	19,9	34,9	50,5	0	0	5,5	59	19,66	19,34	68,49		0	0	27,85	M
	(d) Σ 8.....	53,4	7,1	21,0	34,1	47,0	0,9	0	3	14,2	2	33,96	33,64			0	3	42,15	M
Sept. 24	(e) ρ^2 Sagittarii.....	0,7	15,0	28,9	43,1	57,4	11,9	19	12	26,0	11	43,29	42,98		0,93	19	12	52,15	M
	α Aquilæ.....	27,0	40,7	54,1	7,9	21,6	34,9	19	42	48,5	42	7,82	7,49	69,16					M
	β Aquarii.....	37,9	51,9	5,0	18,9	32,6	46,0	21	22	59,3	22	18,80	18,49	69,30		21	23	27,75	M
	ζ Aquarii.....	5,9	19,1	32,5	46,0	59,4	12,9	22	20	26,1	19	45,99	45,67			22	20	54,96	M
	(f) B. xxii. 741.....	....	55,5	9,4	22,9	36,1	50,0	22	34	3,9	33	22,89	22,57			22	34	31,87	M
Sept. 25	(g) B.A.C. 6896.....	9,0	22,9	36,9	51,1	5,0	18,8	19	56	33,0	55	50,96	50,63		0,97	19	57	0,77	M
	(g) α^2 Capricorni.....	39,6	53,4	7,1	21,5	34,8	48,9	20	9	2,9	8	21,11	20,80	70,16					M
Sept. 26	(h) Σ 2577.....	42,8	57,1	11,6	25,9	40,5	54,4	19	39	9,1	38	25,92	25,60		1,03	19	39	36,68	M
	α Aquilæ.....	25,1	38,6	51,9	6,2	19,5	32,9	19	42	46,8	42	5,86	5,54	71,08		19	43	16,62	M
	(e) β Aquilæ.....	54,1	7,6	20,9	34,5	48,4	1,9	19	47	15,5	46	34,70	34,37	71,04		19	47	45,46	M
	α Aquarii.....	1,9	16,0	28,9	42,2	55,9	9,5	21	57	23,1	56	42,51	42,20	71,16		21	57	53,38	M
	(i) Σ 2936.....	15,5	28,9	42,4	56,2	9,5	22,9	22	34	36,8	33	56,03	55,72			22	35	6,93	M
	β Ceti.....	....	13,1	27,5	41,6	55,9	10,1	0	35	24,1	34	41,60	41,30	71,20		0	35	52,60	M
	(k) Polaris.....	8,3	....	5,5	45,9	13,1	42,3	1	29	14,8	3	41,76	40,27						M
	(l) ϕ^3 Ceti.....	26,9	41,0	54,1	8,3	21,9	35,6	0	47	49,5	47	8,19	7,88			0	48	19,18	M
	(m) B. o. 962.....	42,9	57,1	10,4	24,6	38,1	51,9	0	54	5,7	53	24,39	24,08			0	54	35,39	M
	η Ceti.....	59,6	13,3	26,9	40,9	54,0	7,9	1	0	22,0	59	40,66	40,35			1	0	51,66	M
	(e) 37 Ceti.....	....	1,6	14,9	29,0	42,4	55,5	1	6	9,6	5	28,68	28,37			1	6	39,69	M
	α Arietis.....	36,6	51,3	5,7	20,3	34,9	49,7	1	58	3,9	57	20,35	20,04	71,52		1	58	31,40	M
Sept. 27	(n) 15 Sagittæ.....	17,5	31,6	45,7	59,9	13,8	....	19	56	41,9	55	59,76	59,44		1,09	19	57	11,61	M
	(o) α^2 Capricorni.....	37,7	51,4	5,1	19,1	33,0	46,6	20	9	0,4	8	19,08	18,77	72,16		20	9	30,95	M
	(n) β Aquarii.....	35,2	48,9	2,4	....	29,4	42,9	21	22	55,9	22	15,79	15,49	72,27		21	23	27,73	M
	Σ 8.....	51,6	3,3	16,5	30,4	43,8	57,5	0	3	10,6	2	30,54	30,23			0	3	42,59	M
	β Ceti.....	58,0	11,9	26,0	40,4	54,6	8,9	0	35	23,1	34	40,42	40,12	72,39		0	35	52,51	M
	ϕ^3 Ceti.....	26,1	39,9	53,2	7,5	21,1	34,8	0	47	48,4	47	7,29	6,98			0	48	19,38	M
	ϕ^4 Ceti.....	8,9	22,9	36,2	52,5	3,9	18,0	0	50	31,9	49	50,33	50,02			0	51	2,42	M
	B. o. 962.....	41,9	55,9	9,6	23,7	37,0	50,9	0	54	4,7	53	23,39	23,08			0	54	35,48	M
	* N.P.D. 99°. 29'.	21,7	35,1	48,9	2,2	16,0	29,6	0	57	43,1	57	2,38	2,07			0	58	14,47	M
Sept. 30	β Aquarii.....	31,9	45,4	59,0	12,5	26,0	39,4	21	22	53,1	22	12,48	12,18	75,55	1,17	21	23	27,72	M
	α Andromedæ.....	26,9	41,9	57,0	12,3	27,9	43,1	23	59	58,1	59	12,46	12,15	75,70		0	0	27,82	M
	(p) β Ceti.....	54,5	8,6	22,9	37,1	51,5	5,9	0	35	19,9	34	37,20	36,90	75,63		0	35	52,60	M
	(q) Polaris.....	4,9	37,8	1,5	39,4	11,1	39,4	1	29	11,6	3	37,96	36,47						M
	ϕ^4 Ceti.....	6,0	19,3	33,0	47,0	0,8	14,5	0	50	28,3	49	46,99	46,68			0	51	2,39	M
	28 Ceti.....	25,9	40,1	53,4	7,0	20,9	34,6	0	57	48,5	57	7,20	6,89			0	58	22,61	M
	(r) η Ceti.....	55,3	8,9	23,0	36,4	49,8	3,9	1	0	17,4	59	36,39	36,08			1	0	51,80	M
	H. C. 2553.....	....	49,1	2,9	16,5	30,1	43,4	1	15	56,9	15	16,41	16,09			1	16	31,82	M
	B. i. 576.....	25,1	38,8	52,5	5,9	20,0	33,4	1	31	47,0	31	6,10	5,77			1	32	21,51	M
	(s) B. i. 988.....	8,2	21,9	35,1	48,9	2,9	16,6	1	54	30,5	53	49,16	48,83			1	55	4,59	M
	α Arietis.....	32,9	47,1	1,5	16,0	30,8	44,9	1	57	59,4	57	16,09	15,84	75,79		1	58	31,61	M
Oct. 3	(t) α Pegasi.....	6,4	20,1	33,9	48,0	1,9	16,0	22	57	....	56	48,00	47,66	19,23	1,20	22	57	7,00	M
	(t) β Ceti.....	50,9	5,2	19,0	33,1	47,9	1,9	0	36	16,0	35	33,44	33,08	19,46		0	35	52,51	M
	* N.P.D. 103°. 5'.	53,9	8,1	21,4	35,8	49,5	2,9	0	50	17,1	49	35,53	35,17			0	49	54,61	M
	28 Ceti.....	22,9	36,3	49,9	3,9	17,4	31,1	0	58	54,9	58	3,78	3,43			0	58	22,88	M
	η Ceti.....	51,8	5,0	18,9	32,9	46,5	0,3	1	1	13,9	0	32,77	32,42			1	0	51,87	M
	32 Ceti.....	....	....	57,0	10,9	24,4	37,9	1	2	51,6	2	10,70	10,35			1	2	29,80	M
	36 Ceti.....	....	....	....	44,9	58,2	11,9	1	5	25,1	4	44,62	44,26			1	5	3,71	M
	B. i. 186.....	51,4	4,9	18,4	32,1	45,6	58,9	1	12	12,6	11	31,99	31,64			1	11	51,10	M

ILLUMINATED END OF AXIS WEST. COLLIMATION Error = - 0",43. LEVEL Error = - 2",43. From Sept. 26 = - 2",29. From Oct. 3 = - 2",01. AZIMUTH Error = - 3",23. From Oct. 3 = - 4",16. Oct. 1, 22^h. Hardy was put forward 1^m.

(a) All these very indistinct or unsteady: ζ Aquarii was scarcely seen to be double. (b) Hazy. (c) Indistinct and unsteady. (d) Faint. This was a bad night for observations. (e) Unsteadiness. (f) Faint. No other in the field. (g) Faint from cloud. (h) 'A faint companion 10" distant in R.A. and of less N.P.D.' (i) Corrected by +1". See the observations of this star on Oct. 11 and 13. (k) Radiation. (l) Corrected by +5" for error of counting. (m) Very faint. (n) Clouds. (o) High wind. (p) Indistinct. (q) Much stray light. (r) Hurried. (s) The brighter and northern of two. (t) Clouded.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.				
Oct. 3	B. I. 223.....	54,9	8,4	21,9	35,5	48,9	2,1	1.14.15,9	13.35,37	35,02			1,20	1.13.54,48	M		
	B. I. 276.....	51,5	4,9	18,1	31,9	45,4	58,6	1.17.11,9	16.31,76	31,40				1.16.50,87	M		
	B. I. 497.....	29,9	43,6	57,1	10,6	23,9	37,8	1.28.51,0	28.10,56	10,21				1.28.29,69	M		
	(a) B. I. 568.....	9,2	22,6	36,1	50,0	3,1	16,9	1.32.29,9	31.49,69	49,34				1.32.8,82	M		
	B. I. 736.....	37,0	50,8	4,0	18,1	31,4	44,9	1.40.58,5	40.17,82	17,46				1.40.36,95	M		
	(a) B. I. 988.....	4,7	18,1	31,8	45,6	59,1	12,9	1.55.27,0	54.45,60	45,25				1.55.4,75	M		
	α Arietis.....	28,4	43,1	58,0	12,7	26,9	41,5	1.58.56,1	58.12,39	12,06	19,61			1.58.31,56	M		
Oct. 4	(b) α Aquarii.....	52,5	5,9	19,4	32,9	21.57.	57.32,89	32,54		20,75	1,11		M		
Oct. 7	α Pegasi.....	1,9	15,3	29,0	43,1	57,3	10,9	22.57.24,9	56.43,21	42,87	24,00	1,02	22.57.6,68	M			
	(c) α Andromedæ....	18,5	33,9	48,9	4,5	19,9	34,9	0.0.50,4	0.4,44	4,12	23,75		0.0.27,98	M			
	(c) β Ceti.....	46,7	0,8	14,9	29,1	43,0	57,3	0.36.12,0	35.29,12	28,76	23,80		0.35.52,65	M			
	(d) * N.P.D. 103°. 5'.	49,1	2,9	16,9	31,0	45,0	58,5	0.50.12,7	49.30,88	30,52			0.49.54,41	M			
	(e) Polaris M.....	21,6	5,5	48,9	32,7	13,7	59,0	1.6.41,1	4.29,25	29,70				M			
	(f) B. I. 186.....	46,9	0,6	14,1	27,4	41,3	54,7	1.12.7,9	11.27,56	27,21			1.11.51,12	M			
	(f) B. I. 237.....	41,9	55,5	9,0	22,9	36,3	50,0	1.15.3,9	14.22,79	22,43			1.14.46,34	M			
	(g) B. I. 576.....	17,5	30,9	44,0	57,9	11,5	24,9	1.32.38,5	31.57,89	57,54			1.32.21,46	M			
	B. I. 736.....	32,1	45,9	0,0	13,6	27,0	40,5	1.40.54,0	40.13,30	12,94			1.40.36,87	M			
	(h) B. I. 988.....	....	....	27,1	40,9	54,5	8,4	1.55.21,7	54.40,81	40,46			1.55.4,40	M	
	(c) α Arietis.....	24,2	39,1	53,0	8,0	22,8	37,5	1.58.52,0	58.8,09	7,76	23,97		1.58.31,70	M			
Oct. 8	β Lyræ.....	10,9	27,1	43,9	59,4	15,6	31,8	18.44.47,5	43.59,46	59,15	24,49	0,94		M			
Oct. 9	(c) β Ceti.....	43,9	58,6	12,6	26,9	41,5	55,0	0.36.9,6	35.26,87	26,68		25,88	0,86		M		
	(f) * N.P.D. 103°. 5'.	47,6	1,1	14,9	28,9	42,9	56,6	0.50.9,9	49.28,85	28,67			0.49.54,51	M			
	(i) 28 Ceti.....	16,0	29,9	42,9	57,0	10,9	24,9	0.58.38,5	57.57,16	56,97			0.58.22,82	M			
	B. I. 51.....	51,9	5,6	18,9	32,9	46,5	0,0	1.4.14,0	3.32,84	32,67			1.3.58,52	M			
	(i) 37 Ceti.....	33,6	47,0	0,6	14,1	27,9	41,5	1.6.54,9	6.14,23	14,06			1.6.39,91	M			
	(f) B. I. 186.....	44,9	58,6	11,9	25,6	39,2	52,8	1.12.6,5	11.25,64	25,47			1.11.51,32	M			
	B. I. 228.....	15,1	28,5	42,0	55,9	9,4	23,0	1.14.35,8	13.55,67	55,50			1.14.21,35	M			
	H. C. 2553.....	....	....	....	....	19,9	32,9	1.16.46,8	16.6,18	6,01			1.16.31,87	M
	B. I. 497.....	24,0	37,1	50,3	3,9	18,0	30,9	1.28.44,6	28.4,11	3,94			1.28.29,80	M			
	B. I. 568.....	2,9	16,1	29,9	43,5	57,0	10,1	1.32.23,5	31.43,29	43,13			1.32.8,99	M			
	B. I. 736.....	30,1	43,9	57,9	11,0	25,0	38,2	1.40.51,9	40.11,15	11,00			1.40.36,87	M			
	(k) B. I. 988.....	....	....	....	38,9	53,1	6,4	1.55.20,0	54.39,01	38,87			1.55.4,75	M
	α Arietis.....	22,1	37,0	51,0	6,1	20,9	35,4	1.58.49,9	58.6,06	5,92	25,83				M		
	Oct. 10	α Pegasi.....	58,6	12,1	26,9	40,1	54,0	7,9	22.57.22,0	56.40,23	40,10	26,74	0,96	22.57.6,68	M		
(l) α Andromedæ....		15,4	30,9	46,0	1,1	16,9	31,9	0.0.47,3	0.1,36	1,23	26,64		0.0.27,85	M			
(m) β Ceti.....		44,0	57,6	11,9	....	40,5	55,0	0.36.8,9	35.26,31	26,12	26,44		0.35.52,76	M		
(n) Polaris M.....		13,1	56,5	39,9	23,4	6,1	50,5	1.6.32,9	4.25,74	28,19			1.4.54,85	M			
(o) B. I. 186.....		44,5	57,9	11,1	24,5	37,6	....	1.12.6,5	11.24,86	24,69			1.11.51,36	M		
(o) B. I. 237.....		....	53,1	5,9	19,5	34,0	....	1.15.0,1	14.19,81	19,64			1.14.46,31	M	
B. I. 736.....		29,6	43,4	56,6	10,5	24,1	37,4	1.40.50,9	40.10,36	10,21			1.40.36,90	M			
(p) B. I. 988.....		56,9	....	24,5	38,1	52,4	5,6	1.55.19,1	54.38,20	38,06			1.55.4,76	M		
Oct. 11	Σ 2936.....	59,0	12,6	25,9	39,6	52,9	6,6	22.35.19,9	34.39,50	39,34			1,07	22.35.6,94	M		
	α Pegasi.....	57,6	11,5	24,9	39,3	53,5	6,9	22.57.21,1	56.39,26	39,13	27,71		22.57.6,74	M			
	(c) α Andromedæ....	14,6	29,9	45,1	0,2	16,0	30,9	0.0.46,0	0.0,39	0,26	27,60		0.0.27,92	M			
	(q) β Ceti.....	42,1	56,5	10,9	25,2	39,6	53,5	0.36.7,9	35.25,10	24,91	27,65		0.35.52,60	M			
	(f) * N.P.D. 103°. 5'.	45,6	59,1	12,9	27,0	40,9	54,6	0.50.8,4	49.26,93	26,76			0.49.54,46	M			
	(i) 32 Ceti.....	21,0	35,0	48,3	1,9	16,4	29,6	1.2.42,9	2.2,16	1,98			1.2.29,68	M			
	(i) 36 Ceti.....	55,6	8,9	22,0	35,9	50,1	3,4	1.5.17,5	4.36,20	36,02			1.5.3,73	M			
	B. I. 228.....	12,9	26,9	40,2	54,0	7,4	20,9	1.14.34,1	13.53,77	53,60			1.14.21,31	M			
	H. C. 2553.....	23,9	37,4	50,9	4,5	17,9	31,4	1.16.44,9	16.4,41	4,25			1.16.31,97	M			
	(r) B. I. 576.....	13,4	26,9	40,5	54,0	7,4	21,5	1.32.34,9	31.54,09	53,94			1.32.21,67	M			
	B. I. 736.....	28,5	42,2	55,9	9,0	23,0	35,9	1.40.50,0	40.9,22	9,07			1.40.36,81	M			
	(s) * N.P.D. 78°. 50'.	....	33,9	48,5	....	15,6	29,5	1.57.42,9	57.1,83	1,69			1.57.29,44	M	
	Oct. 13	(t) Σ 2577.....	6,9	35,4	19.39.50,0	39.6,83	6,74		1,16	19.39.36,40	M		

ILLUMINATED END OF AXIS WEST. From Oct. 9, EAST. COLLIMATION Error = - 0",43. From Oct. 9 = + 0",22.
 LEVEL Error = - 2",01. From Oct. 9 = - 1",25. From Oct. 13 = - 0",65. AZIMUTH Error = - 4",16. From Oct. 9 = - 2",65.

(a) Very faint. (b) Clouded. (c) Radiation. (d) Corrected by +1^s for error of counting. (e) Radiating and unsteady. (f) Faint.
 (g) Faint at wires I, II, and III. (h) Extremely faint. Wires V, VI, and VII, have been corrected by +10^s for error of counting. (i) Unsteadiness.
 (k) 'The northern and brighter of two: not seen till it reached Wire IV.' (l) The star had a hazy appearance. (m) Wire IV lost by pencil breaking.
 (n) Misty. (o) Obscured by cloud. (p) Very faint from cloud. Correction -10^s has been applied: see Oct. 9. (q) Unsteady and indefinite.
 (r) Flickering. (s) Of magnitude 9,10. (t) Has a faint companion of less N.P.D.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Oct. 13	β Aquilæ.....	34,9	48,5	1,9	15,4	28,8	42,3	19	47	56,1	47	15,41	15,29	29,83	1,16	19	47	44,96	M
	Σ 2622. <i>nf</i>	57,9	12,0	25,9	40,0	54,4	8,0	19	57	21,9	56	40,02	39,92			19	57	9,59	M
	Σ 2936.....	57,0	10,5	23,9	37,5	50,9	4,2	22	35	17,6	34	37,37	37,23			22	35	7,03	M
	α Pegasi.....	55,1	9,0	23,1	37,2	51,1	4,9	22	57	18,9	56	37,04	36,94	29,88		22	57	6,76	M
	(a) β Ceti.....	40,1	54,6	8,6	23,0	37,6	51,5	0	36	5,8	35	23,04	22,87	29,70		0	35	52,77	M
	Polaris.....	43,6	17,5	50,3	16,5	56,4	19,6	1	29	54,1	4	19,71	23,37			1	4	53,29	M
	37 Ceti.....	29,1	42,9	56,6	10,3	24,1	37,4	1	6	50,9	6	10,19	10,03			1	6	39,95	M
	B. I. 237.....	....	49,8	3,2	16,8	30,4	43,9	1	14	57,5	14	16,85	16,71			1	14	46,64	M
	B. I. 497.....	19,9	33,1	46,4	59,9	13,5	27,0	1	28	40,4	28	0,03	59,90			1	28	29,84	M
	B. I. 568.....	....	11,9	25,4	38,9	53,0	5,9	1	32	19,5	31	39,02	38,89			1	32	8,83	M
	B.A.C. 609.....	2,0	15,9	29,5	43,4	56,9	11,0	1	51	24,6	50	43,34	43,23			1	51	13,19	M
	(b) Polaris SP.....	52,3	29,5	48,1	15,5	59,5	32,6	13	30	7,0	4	26,36	22,28			1	4	52,20	M
Oct. 14	(b) Arcturus.....	23,5	37,9	51,5	6,5	21,0	34,9	14	8	49,9	8	6,46	6,37	30,66	1,20	14	8	36,95	M
	(c) Σ 2577.....	22,9	37,3	51,1	5,9	20,1	34,4	19	39	48,9	39	5,80	5,71			19	39	36,56	M
	B.A.C. 6896.....	47,4	1,5	15,0	29,1	43,9	57,5	19	57	11,6	56	29,43	29,33			19	57	0,20	M
	α Aquarii.....	41,9	55,1	8,9	22,0	35,9	48,9	21	58	2,8	57	22,22	22,07	31,11		21	57	53,04	M
	α Andromedæ....	11,1	26,4	41,5	56,9	12,3	27,5	0	0	42,8	59	56,93	56,85	31,01		0	0	27,92	M
	β Ceti.....	38,9	53,4	7,7	21,9	36,1	49,9	0	36	4,6	35	21,79	21,62	30,95		0	35	52,72	M
	Polaris.....	42,5	15,6	50,1	13,9	51,5	18,4	1	29	49,5	4	17,36	21,02			1	4	52,15	M
	(d) 37 Ceti.....	28,3	41,8	55,1	8,9	22,0	36,1	1	6	49,9	6	9,00	8,84			1	6	39,97	M
	B. I. 228.....	....	23,4	36,8	50,3	3,8	17,3	1	14	30,9	13	50,32	50,18			1	14	21,31	M
	(e) B. I. 276.....	39,6	52,9	6,4	20,0	33,5	46,9	1	17	0,1	16	19,92	19,78			1	16	50,92	M
	B. I. 497.....	17,9	31,6	45,2	58,9	12,3	25,9	1	28	39,5	27	58,76	58,63			1	28	29,78	M
	B. I. 576.....	10,1	23,8	37,1	50,6	4,2	17,6	1	32	31,5	31	50,71	50,59			1	32	21,74	M
	B.A.C. 609.....	0,9	15,0	28,3	41,9	55,9	9,6	1	51	23,1	50	42,11	42,00			1	51	13,16	M
	(f) * N.P.D. 78°. 50'.	16,5	....	44,1	....	12,6	25,9	1	57	39,3	56	58,18	58,07			1	57	29,24	M
Oct. 16	(g) β Ceti.....	36,6	50,9	5,1	18,9	33,6	47,2	0	36	1,9	35	19,18	19,01	33,56	1,23				M
	36 Ceti.....	49,9	3,6	17,1	30,9	44,5	57,9	1	5	11,4	4	30,76	30,60			1	5	4,19	M
	B. I. 237.....	32,8	45,9	59,6	13,3	26,9	39,9	1	14	53,7	14	13,16	13,02			1	14	46,61	M
	B. I. 276.....	37,4	50,5	4,1	17,5	31,1	44,5	1	16	57,9	16	17,57	17,43			1	16	51,03	M
	B. I. 497.....	15,9	29,5	42,8	55,9	10,0	23,5	1	28	37,3	27	56,42	56,29			1	28	29,90	M
	B. I. 576.....	8,1	21,4	34,8	48,6	2,1	15,4	1	32	29,0	31	48,49	48,37			1	32	21,98	M
	α Arietis.....	14,9	29,0	43,7	57,9	13,0	27,7	1	58	41,8	57	58,29	58,20	33,64					M
Oct. 23	α Arietis.....	7,1	21,5	36,1	51,0	5,5	20,2	1	58	34,5	57	50,85	50,69	41,21	0,99				C
	α Ceti.....	....	7,4	20,9	34,1	48,0	1,2	2	54	14,7	53	34,30	34,10	41,40					C
Oct. 24	(h) α Pegasi.....	42,8	56,7	10,6	24,5	38,6	52,5	22	57	6,4	56	24,59	24,43	42,29	0,99				C
	(i) Σ 3045.....	11,2	24,7	38,2	51,7	5,2	18,4	23	46	32,0	45	51,64	51,44			23	46	33,62	C
	(k) Σ 3055.....	44,7	58,5	12,2	26,0	40,0	53,4	23	56	7,3	55	26,02	25,85			23	56	8,04	C
	α Andromedæ....	0,0	15,3	30,5	45,7	1,6	16,4	0	0	31,7	59	45,89	45,75	42,06					C
Oct. 31	(l) Polaris.....	20,0	55,5	24,7	57,4	35,3	59,4	1	29	34,7	3	58,14	2,61		0,91				C
	(m) B. I. 736.....	6,6	20,3	33,7	47,2	1,0	14,4	1	40	28,1	39	47,33	47,14			1	40	37,06	C
	B.A.C. 609.....	42,3	56,0	9,8	23,6	37,5	51,2	1	51	5,0	50	23,64	23,47			1	51	13,40	C
	α Arietis.....	58,5	13,0	27,5	42,1	56,9	11,2	1	58	25,9	57	42,16	42,00	49,96					C
	α Ceti.....	45,6	59,0	12,3	25,7	39,5	52,7	2	54	6,3	53	25,87	25,67	49,93					C
	(b) Polaris SP.....	32,0	2,4	28,0	12,5	38,7	7,8	13	29	43,0	4	6,34	1,39						C
	α Pegasi.....	34,4	48,3	2,0	15,8	30,0	43,7	22	56	57,7	56	15,99	15,83	50,81	0,95	22	57	6,56	C
Nov. 1	α Andromedæ....	51,4	6,5	21,9	37,2	52,6	7,6	0	0	23,1	59	37,19	37,05	50,71		0	0	27,82	C
	(n) Polaris.....	23,5	51,7	23,8	51,8	31,6	57,5	1	29	30,0	3	55,70	0,17			1	4	50,98	C
	(n) α Arietis.....	57,5	12,2	26,7	41,1	56,1	10,3	1	58	25,2	57	41,31	41,15	50,81		1	58	32,00	C
Nov. 3	β Ceti.....	17,4	31,3	45,5	0,0	14,3	28,2	0	35	42,6	34	59,91	59,66	52,86		0	35	52,50	C
	(o) B. I. 223.....	21,4	35,1	48,5	2,2	15,5	28,9	1	13	42,4	13	2,00	1,79			1	13	54,65	C
	(p) B. I. 568.....	36,1	49,3	2,6	16,2	30,2	43,4	1	31	56,9	31	16,39	16,19			1	32	9,07	C
	B.A.C. 609.....	39,2	52,9	6,6	20,3	34,4	47,8	1	51	1,5	50	20,39	20,22			1	51	13,11	C
	α Arietis.....	55,6	10,0	24,7	39,2	53,9	8,5	1	58	23,1	57	39,29	39,13	52,84		1	58	32,03	C
	α Ceti.....	42,4	55,8	9,3	22,7	36,5	49,8	2	54	3,4	53	22,85	22,65	52,97		2	54	15,59	C

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 0",22. LEVEL Error = - 0",65. From Oct. 23 = - 1",04.
 AZIMUTH Error = - 2",65. From Oct. 23 = - 3",67.

(a) Radiation. (b) Great motion. (c) Very faint: the companion just visible. (d) Unsteady. (e) Wires VI and VII have been corrected by +3".
 looking at clock. (f) Too faint to observe accurately. (g) Hurried. (h) Wires I and II have been corrected by -2": error discovered by counting. (i) Appeared a close double: observed as single. (k) The small star not seen: sky hazy. (l) Flaring and unsteady.
 (m) No star near this. (n) Thick mist. (o) Star faint, and observation confused. Wires VI and VII have been corrected by -2" for error of counting. (p) Not good: star faint.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.	Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.	Observer.	
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.		
Nov. 10	(a) B. I. 237.....	4,9	18,8	32,1	45,3	59,4	12,7	1. 14. 26,2	13. 45,63	45,45		1,22	1. 14. 46,35	M	
	(a) B. I. 276.....	....	....	36,5	49,9	3,8	17,1	1. 16. 30,5	15. 50,09	49,92			1. 16. 50,82	M
	B.A.C. 632.....	34,9	49,1	2,5	17,1	31,6	45,4	1. 54. 59,8	54. 17,20	17,09			1. 55. 18,03	M	
	α Arietis.....	47,1	2,1	16,5	31,4	45,9	0,4	1. 58. 14,9	57. 31,19	31,10	60,89				M
	α Ceti.....	34,1	47,9	0,9	15,0	28,6	41,9	2. 53. 55,1	53. 14,79	14,64	61,04				M
Nov. 14	α Aquarii.....	6,9	20,1	33,6	46,9	0,5	13,9	21. 57. 27,1	56. 47,00	46,93	65,83	1,24	21. 57. 52,54	M	
	β Ceti.....	4,1	18,5	32,5	46,8	1,4	15,5	0. 35. 29,8	34. 46,94	46,84	65,60		0. 35. 52,59	M	
	ε Piscium.....	41,8	54,9	9,0	22,0	35,8	48,9	1. 0. 2,9	59. 22,19	22,13			1. 0. 27,90	M	
	32 Ceti.....	....	56,9	10,1	23,9	37,9	51,7	1. 2. 5,1	1. 24,10	24,01			1. 2. 29,78	M
	(b) B. I. 568.....	21,9	35,4	49,9	3,3	17,1	31,1	1. 31. 43,5	31. 3,18	3,12			1. 32. 8,92	M	
	B.A.C. 549.....	14,1	29,0	42,8	56,5	10,9	24,6	1. 39. 39,1	38. 56,72	56,70			1. 40. 2,50	M	
	(c) B.A.C. 609.....	26,2	39,9	53,8	7,7	21,3	34,9	1. 50. 48,8	50. 7,52	7,48			1. 51. 13,29	M	
	(d) α Arietis.....	42,6	57,0	11,8	25,9	41,1	55,4	1. 58. 10,1	57. 26,27	26,24	65,76		1. 58. 32,06	M	
	(e) α Andromedæ....	31,8	47,5	2,9	18,1	33,9	49,0	0. 0. 3,9	59. 18,16	18,16	69,46	1,35	0. 0. 27,61	M	
	(e) β Ceti.....	0,0	14,9	28,9	43,0	57,8	11,1	0. 35. 25,9	34. 43,09	43,00	69,42		0. 35. 52,54	M	
(f) Polaris.....	59,1	31,5	3,1	31,6	14,5	40,9	1. 29. 15,5	3. 36,60	40,89			1. 4. 50,46	M		
Nov. 17	(g) ε Piscium.....	37,9	51,2	3,9	18,0	31,9	45,0	0. 59. 58,9	59. 18,12	18,07			1. 0. 27,64	M	
	(b) B.A.C. 549.....	11,1	24,9	38,9	53,0	7,0	20,9	1. 39. 35,0	38. 52,98	52,97			1. 40. 2,57	M	
	α Arietis.....	38,2	53,1	8,0	22,0	36,8	51,6	1. 58. 5,8	57. 22,22	22,20	69,80		1. 58. 31,82	M	
	B. I. 223.....	3,2	16,8	30,2	43,9	57,3	10,9	1. 13. 24,0	12. 43,76	43,70		1,34	1. 13. 54,67	M	
	H. C. 2553.....	40,8	54,0	7,9	20,9	34,9	48,1	1. 16. 1,9	15. 21,22	21,16			1. 16. 32,13	M	
Nov. 18	(h) * N.P.D. 33°. 36'.	53,9	0,1	....	50,0	16,1	38,4	1. 23. 3,1	21. 49,53	49,62			1. 23. 0,60	M
	(d) α Arietis.....	37,1	51,8	5,9	21,1	36,0	49,9	1. 58. 5,0	57. 20,98	20,96	71,04		1. 58. 31,97	M	
	α Ceti.....	24,0	37,9	51,1	5,0	18,2	31,8	2. 53. 44,9	53. 4,70	4,65	71,08		2. 54. 15,71	M	
	Aldebaran.....	13,9	28,1	41,9	55,1	10,0	24,0	4. 26. 38,1	25. 56,02	56,01	71,18		4. 27. 7,16	M	
	Rigel.....	17,9	31,8	44,9	59,1	12,8	25,9	5. 6. 39,9	5. 58,90	58,82	71,11		5. 7. 10,00	M	
	β Tauri.....	38,1	53,8	9,0	24,2	39,9	55,0	5. 16. 10,2	15. 24,32	24,32	71,18		5. 16. 35,52	M	
	(i) α Andromedæ....	29,4	45,0	59,9	15,6	31,0	46,1	0. 0. 0,9	59. 15,41	15,41	72,19	1,37	0. 0. 27,62	M	
	B. I. 51.....	4,9	18,6	32,1	45,9	59,8	13,0	1. 3. 26,8	2. 45,87	45,79			1. 3. 58,06	M	
Nov. 19	(k) B. I. 223.....	....	....	....	42,1	55,9	9,0	1. 13. 22,8	12. 42,18	42,12			1. 13. 54,40	M
	(l) H. C. 2553.....	39,1	52,8	6,1	19,9	....	....	1. 15.	15. 19,75	19,69			1. 16. 31,97	M
	(m) * N.P.D. 33°. 36'.	....	0,4	24,9	48,1	11,0	36,5	1. 23. 1,8	21. 48,28	48,37			1. 23. 0,66	M
	(i) α Arietis.....	35,9	50,6	4,9	20,0	34,0	48,9	1. 58. 3,5	57. 19,68	19,66	72,34		1. 58. 31,98	M	
	(n) α Ceti.....	23,1	36,3	50,1	3,2	16,9	30,6	2. 53. 43,8	53. 3,43	3,38	72,36		2. 54. 15,76	M	
	Polaris.....	49,5	24,9	54,8	26,9	6,6	31,5	1. 29. 8,4	3. 28,94	33,23		1,31	1. 4. 46,94	M	
	H. C. 2553.....	38,1	51,8	5,1	18,2	32,1	45,3	1. 15. 59,0	15. 18,52	18,46			1. 16. 32,18	M	
Nov. 20	α Arietis.....	34,6	49,1	3,9	18,0	32,9	47,9	1. 58. 1,9	57. 18,33	18,31	73,69		1. 58. 32,07	M	
	α Ceti.....	21,4	34,9	48,2	2,0	15,7	29,0	2. 53. 42,5	53. 1,95	1,90	73,84		2. 54. 15,71	M	
	Rigel.....	....	28,9	42,3	56,1	9,9	23,0	5. 6. 36,9	5. 56,04	55,96	74,00		5. 7. 9,89	M
	(d) β Tauri.....	35,8	51,1	5,9	21,9	37,0	51,9	5. 16. 7,9	15. 21,64	21,64	73,90		5. 16. 35,58	M	
	Polaris SP.....	....	....	....	....	....	41,0	13. 29. 12,8	3. 35,47	30,99		0,94	13. 4. 46,35	C
Nov. 22	(o) β Ceti.....	53,9	8,1	22,4	36,9	51,1	5,1	0. 35. 19,5	34. 36,72	36,63	75,74				M
	(p) Polaris.....	44,9	22,8	53,5	23,2	5,5	28,9	1. 29. 5,0	3. 26,26	30,55			1. 4. 46,38	M	
	α Arietis.....	31,9	47,0	1,2	16,4	30,9	45,1	1. 58. 0,0	57. 16,07	16,05	75,94				M
Nov. 23	(q) β Ceti.....	53,1	7,3	21,6	35,9	50,1	4,1	0. 35. 18,4	34. 35,79	35,75	76,62	0,76			M
	(r) Polaris.....	47,6	18,9	50,5	22,3	1,9	1. 12.	3. 24,65	27,63					M
Nov. 25	(s) Polaris.....	43,9	16,8	22,4	2,3	27,0	1. 29. 1,5	3. 23,36	25,31					M
	α Arietis.....	30,0	44,9	59,0	14,1	28,9	43,0	1. 57. 58,0	57. 13,98	14,02	77,97				M
	(s) α Ceti.....	16,9	31,0	44,1	58,0	11,2	24,6	2. 53. 38,1	52. 57,70	57,72	78,04				M
Nov. 27	(t) α Arietis.....	28,9	43,1	57,4	11,9	26,8	41,6	1. 57. 56,1	57. 12,25	12,29	79,70	0,89			M

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 0",22. LEVEL Error = + 0",04. From Nov. 17 = + 0",23. From Nov. 23 = + 0",12. AZIMUTH Error = - 3",67. From Nov. 14 = - 1",82. From Nov. 23 = - 1",09. From Nov. 25 = - 0",40.

(a) Much obscured by cloud. (b) Very faint. (c) Hazy. (d) Radiation. (e) Obscured by mist. (f) Misty at all the wires except I and II. (g) Not good: taken in an unsettled posture. (h) Quite doubtful on account of the faintness of the star. The N.P.D. is uncertain to 1' or 2'. Another of equal magnitude preceded about two intervals. (i) Strong wind, which moved the instrument. (k) Corrected by + 1". See Nov. 3. (l) Clouded. (m) Star very faint, and wind loud. The correction + 1" has been applied: See Nov. 18 and Dec. 6. (n) Wind too loud for clock. (o) Unsteady. (p) Wire III doubtful: much motion and radiation. (q) Bad definition. (r) Obscured by cloud and finally hid. (s) Through thick cloud: small stars not visible. (t) Disturbance.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.				
Nov. 28	(a) α Aquarii.....	52,0	5,4	18,8	31,9	....	59,1	21. 56.	56. 32,25	32,12	80,46	0,91				M
	(a) * N.P.D. 66°. 45'.	49,5	3,9	18,4	34,1	47,9	....	23. 14.	13. 33,41	33,35				23. 14. 53,82		M
Dec. 1	(b) β Aquarii.....	23,0	36,5	50,3	3,8	17,2	30,8	21. 23. 44,4	23. 3,71	3,54	23,34	0,80		21. 23. 26,79		M	
	α Aquarii.....	49,0	2,8	15,9	29,2	43,1	56,4	21. 58. 9,9	57. 29,47	29,32	23,22			21. 57. 52,59		M	
	(c) H. C. 43516.....	38,8	53,9	9,7	25,0	40,9	56,0	22. 10. 11,2	9. 25,07	24,99				22. 9. 48,27		M	
	(d) * N.P.D. 61°. 54'.	55,4	10,9	26,1	41,0	56,9	12,0	22. 33. 27,1	32. 41,34	41,26				22. 33. 4,55		M	
	(e) * N.P.D. 62°. 5'.	46,6	2,1	16,9	33,1	48,3	3,9	22. 36. 19,5	35. 32,92	32,84				22. 35. 56,13		M	
	(f) * N.P.D. 62°. 23'.	15,9	31,8	47,5	3,5	18,7	34,1	22. 41. 49,5	41. 3,01	2,91				22. 41. 26,21		M	
	(g) * N.P.D. 63°. 12'.	24,8	40,0	54,5	9,9	25,2	40,0	22. 49. 55,1	49. 9,92	9,83				22. 49. 33,13		M	
	* N.P.D. 66°. 8'.	16,2	30,9	46,0	0,2	15,3	30,0	23. 8. 44,8	8. 0,48	0,40				23. 8. 23,71		M	
	(h) H. C. 45649.....	3,9	18,7	33,5	48,2	3,0	17,9	23. 11. 32,1	10. 48,19	48,11				23. 11. 11,42		M	
	(i) * N.P.D. 66°. 47'.	56,8	11,5	25,9	41,1	55,8	9,8	23. 14. 24,6	13. 40,78	40,68				23. 14. 3,99		M	
	α Andromedæ....	18,2	33,4	48,8	4,1	19,8	35,0	0. 0. 50,1	0. 4,20	4,12	23,33			0. 0. 27,46		M	
	(k) Polaris.....	35,7	9,4	40,2	12,9	54,1	18,9	1. 29. 55,5	4. 15,24	20,02				1. 4. 43,40		M	
	α Arietis.....	25,0	39,8	54,1	8,6	23,1	37,7	1. 58. 52,4	58. 8,67	8,57	23,40			1. 58. 31,98		M	
	(l) α Ceti.....	12,0	25,7	39,0	52,1	6,1	19,5	2. 54. 33,0	53. 52,49	52,35	23,42			2. 54. 15,79		M	
	(m) Polaris SP.....	....	....	....	28,2	58,0	28,1	13. 30. 3,7	4. 24,37	19,27				13. 4. 42,99		M
Dec. 2	(l) β Ceti.....	46,1	59,8	14,1	28,0	42,6	57,0	0. 36. 11,1	35. 28,39	28,18	24,10					M	
Dec. 3	α Aquarii.....	47,1	0,9	14,1	28,0	41,0	54,3	21. 58. 8,1	57. 27,65	27,50	25,02	0,69		21. 57. 52,40		M	
	(n) H. C. 43487.....	5,0	20,4	35,8	51,1	6,9	22,1	22. 9. 37,4	8. 51,24	51,16				22. 9. 16,07		M	
	(o) * N.P.D. 61°. 54'.	53,6	9,2	24,1	39,5	55,1	10,0	22. 33. 25,2	32. 39,53	39,45				22. 33. 4,37		M	
	(p) * N.P.D. 62°. 5'.	45,5	4,9	....	31,6	....	57,5	22. 36. 13,1	35. 30,54	30,46				22. 35. 55,38		M
	(p) * N.P.D. 62°. 23'.	16,1	....	46,9	2,1	18,3	31,9	22. 41. 47,4	41. 2,05	1,97				22. 41. 26,89		M
	(p) * N.P.D. 63°. 12'.	....	37,6	....	7,5	23,1	37,9	22. 49. 53,1	49. 7,76	7,67				22. 49. 32,60		M
	α Pegasi.....	59,9	13,7	27,3	41,0	55,6	9,1	22. 57. 22,8	56. 41,34	41,23	25,00			22. 57. 6,16		M	
	(p) * N.P.D. 66°. 8'.	5,1	19,4	43,9	59,0	13,8	28,1	23. 8. 43,1	7. 58,92	58,83				23. 8. 23,76		M	
	(p) H. C. 45649.....	2,1	16,4	31,1	46,5	1,9	15,9	23. 11. 31,4	10. 46,47	46,38				23. 11. 11,32		M	
	(p) * N.P.D. 66°. 45'.	....	....	14,9	29,0	43,5	57,6	23. 15. 12,8	14. 28,90	28,80				23. 14. 53,74		M
	(q) β Ceti.....	45,0	59,1	13,2	27,3	41,9	56,1	0. 36. 10,5	35. 27,59	27,38	24,88			0. 35. 52,36		M	
	(m) 36 Ceti.....	58,1	11,9	25,0	39,0	52,9	6,0	1. 5. 19,7	4. 38,95	38,77				1. 5. 3,76		M	
	(p) B. I. 223.....	49,0	2,9	16,0	29,3	43,4	56,6	1. 14. 10,5	13. 29,68	29,52				1. 13. 54,51		M	
	(p) H. C. 2553.....	26,7	39,9	53,6	7,0	20,9	33,9	1. 16. 47,5	16. 7,07	6,92				1. 16. 31,92		M	
	α Arietis.....	23,4	38,0	52,6	6,9	21,9	36,6	1. 58. 50,9	58. 7,19	7,09	24,88			1. 58. 32,11		M	
	(r) α Ceti.....	10,1	24,1	37,2	50,8	4,4	18,0	2. 54. 31,2	53. 50,83	50,69	25,08			2. 54. 15,73		M	
Dec. 4	(m) α Aquarii.....	46,9	0,2	13,8	27,1	40,4	54,0	21. 58. 7,6	57. 27,15	27,00	25,51	0,59				M	
	(l) α Pegasi.....	21,2	37,4	51,8	7,5	22,9	38,0	22. 34. 53,5	34. 7,47	7,39				22. 34. 32,91		M	
Dec. 5	α Aquarii.....	46,1	59,4	13,1	26,7	40,3	53,6	21. 58. 7,1	57. 26,62	26,43	26,06	0,63		21. 57. 52,51		M	
	(n) H. C. 43487.....	3,9	19,2	34,6	50,1	6,0	20,6	22. 9. 36,1	8. 50,07	49,91				22. 9. 15,99		M	
	* N.P.D. 61°. 54'.	52,5	7,8	23,1	38,5	53,8	8,9	22. 33. 24,1	32. 38,39	38,27				22. 33. 4,36		M	
	(l) * N.P.D. 62°. 5'.	42,5	58,4	14,8	29,2	44,5	59,6	22. 36. 15,4	35. 29,20	29,08				22. 35. 55,17		M	
	(s) * N.P.D. 62°. 23'.	13,5	30,9	44,9	0,5	15,8	31,1	22. 41. 46,5	41. 0,45	0,33				22. 41. 26,43		M	
	(t) * N.P.D. 63°. 12'.	21,6	37,5	....	6,6	22,2	36,8	22. 49. 52,4	49. 6,99	6,86				22. 49. 32,96		M
	(l) * N.P.D. 61°. 34'.	7,3	21,9	....	....	12,9	27,4	22. 53. 41,8	52. 55,23	55,10				22. 53. 21,20		M
	α Pegasi.....	58,4	12,5	26,5	40,1	54,0	7,9	22. 57. 22,0	56. 40,20	40,05	26,16			22. 57. 6,15		M	
	* N.P.D. 66°. 8'.	13,6	28,1	43,0	57,6	12,3	27,2	23. 8. 42,0	7. 57,69	57,55				23. 8. 23,66		M	
	H. C. 45649.....	1,0	15,6	30,5	44,9	0,5	14,9	23. 11. 29,4	10. 45,26	45,13				23. 11. 11,24		M	
	(n) * N.P.D. 66°. 45'.	42,9	58,1	13,0	27,4	42,2	57,0	23. 15. 11,9	14. 27,50	27,36				23. 14. 53,47		M	
	(x) α Andromedæ....	16,0	30,9	46,1	1,5	17,0	....	0. 0.	0. 1,58	1,46	25,94			0. 0. 27,59		M
	B. I. 228.....	15,0	28,1	41,6	55,2	8,6	22,1	1. 14. 35,8	13. 55,20	54,99				1. 14. 21,15		M	
	(y) H. C. 2553.....	25,1	38,9	52,2	5,9	19,6	32,8	1. 16. 46,4	16. 5,84	5,64				1. 16. 31,80		M	
	α Arietis.....	21,9	36,4	51,1	5,9	20,6	35,0	1. 58. 49,5	58. 5,77	5,63	26,33			1. 58. 31,81		M	
	α Ceti.....	9,1	22,6	36,1	49,8	3,4	16,8	2. 54. 30,2	53. 49,72	49,54	26,23			2. 54. 15,75		M	
Dec. 6	H. C. 43487.....	2,8	18,5	34,0	49,5	5,0	20,6	22. 9. 35,9	8. 49,48	49,36			0,70	22. 9. 16,18		M	
	α Pegasi.....	19,9	35,0	50,4	6,0	20,9	36,4	22. 34. 51,9	34. 5,79	5,67				22. 34. 32,51		M	
	(z) * N.P.D. 62°. 23'.	14,6	29,5	44,2	59,6	15,0	30,6	22. 41. 45,1	40. 59,80	59,68				22. 41. 26,52		M	

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = + 0",22. From Dec. 1 = - 0",09. LEVEL Error = + 0",12.
 From Dec. 1 = 0",00. From Dec. 5 = - 0",34. AZIMUTH Error from Nov. 28 = - 2",99. From Dec. 5 = - 3",66.
 Nov. 28, 23^h. Hardy was put forward 1^m.

(a) Clouded. (b) Field not illuminated. (c) An equal star precedes 32^s. (d) The preceding and brighter of two. (e) Very faint.
 (f) At first extremely faint: Mag. 9, 10. (g) Very faint: Wire I was 10^s greater. (h) This is Σ 3000. (i) Accompanied by a fainter of greater N.P.D.
 The N.P.D. is uncertain to 1' or 2'. (k) Cloudy, except at wires I and II. (l) Faint from cloud. (m) Unsteadiness. (n) An equal star follows 32^s.
 (o) Very faint. A smaller follows 6^s. (p) Much obscured by mist: the observations consequently doubtful. (q) Mist and unsteadiness. (r) Bad definition. Wires V, VI, and VII, have been corrected by + 1^s. (s) Very faint: Mag. 9. (t) Extremely faint from cloud. (u) A smaller of the same N.P.D. followed 22^s. (x) Much clouded and at last hid. (y) Corrected by - 1^s for error of counting. (z) About Mag. 9.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.			Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock apparently Slow.	Adopted losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h.	m.	s.	m.	s.	s.	s.	s.	h.	m.	s.	
Dec. 6	* N.P.D. 63°. 12'.	20,8	35,9	51,0	6,5	20,9	35,5	22. 49. 51,3			49. 5,99		5,86		0,70	22. 49. 32,71			M
	* N.P.D. 66°. 8'.	12,7	27,5	42,0	57,0	11,9	26,2	23. 8. 41,0			7. 56,90		56,76			23. 8. 23,61			M
	H. C. 45649.....	59,6	14,8	29,7	44,5	59,6	14,2	23. 11. 29,1			10. 44,50		44,36			23. 11. 11,21			M
	(a) * N.P.D. 66°. 47'.	52,8	7,9	22,6	37,2	51,6	7,1	23. 14. 21,4			13. 37,23		37,09			23. 14. 3,94			M
	α Andromedæ....	14,9	30,0	45,0	0,8	15,9	31,1	0. 0. 46,5			0. 0,60		0,48	26,90		0. 0. 27,36			M
	β Ceti.....	42,9	57,2	11,1	25,8	40,1	54,4	0. 36. 8,2			35. 25,67		25,41	26,82		0. 35. 52,31			M
	36 Ceti.....	56,4	9,8	3,1	37,1	50,6	3,9	1. 5. 17,5			4. 36,92		36,69			1. 5. 3,60			M
	B. r. 237.....	39,1	52,4	5,9	19,6	33,3	46,8	1. 15. 0,9			14. 19,72		19,51			1. 14. 46,42			M
	(b) * N.P.D. 33°. 36'.	20,5	44,6	9,4	33,9	58,1	22,5	1. 23. 47,4			22. 33,77		33,71			1. 23. 0,63			M
	α Arietis.....	21,1	35,9	50,6	4,9	20,1	34,3	1. 58. 48,9			58. 5,12		4,98	26,97		1. 58. 31,92			M
	α Ceti.....	8,4	21,9	35,1	48,8	2,6	16,0	2. 54. 29,5			53. 48,90		48,72	27,05		2. 54. 15,68			M
	(c) Rigel.....	....	16,2	29,7	43,1	56,9	10,4	5. 7. 24,1			6. 43,26		43,03	27,15		5. 7. 10,06			M
	β Tauri.....	22,9	38,5	53,8	9,1	24,5	39,8	5. 16. 54,9			16. 9,07		8,96	26,87		5. 16. 35,99			M
Dec. 7	(d) Polaris SP.....	....	....	....	....	49,9	20,8	13. 29. 53,5			4. 15,12		9,61		0,71	13. 4. 37,41			M
	(e) Arcturus.....	....	....	55,8	10,0	24,3	38,5	14. 8. 53,1			8. 10,01		9,87	27,83					M
Dec. 8	(f) Polaris SP.....	....	....	36,5	16,8	47,9	20,4	13. 21.			4. 14,28		8,77		0,91	13. 4. 37,36			M
	(g) Spica.....	....	9,5	23,1	36,8	51,0	4,1	13. 17. 17,5			16. 36,83		36,60	28,56					M
	(g) Arcturus.....	26,4	40,5	54,8	9,1	23,8	37,9	14. 8. 52,0			8. 9,22		9,08	28,65					M
Dec. 9	(f) Polaris.....	23,6	57,9	28,6	....	43,4	7,2	1. 29. 40,8			4. 3,16		8,24		1,07	1. 4. 37,57			M
	(g) α Arietis.....	19,1	33,5	48,1	3,0	17,6	31,9	1. 58. 46,1			58. 2,75		2,61	29,33		1. 58. 31,98			M
	(h) Aldebaran.....	56,0	10,1	24,0	38,0	52,4	5,9	4. 27. 20,3			26. 38,10		37,95	29,48		4. 27. 7,43			M
	(i) Rigel.....	0,2	13,4	27,1	40,9	54,6	8,1	5. 7. 21,8			6. 40,87		40,65	29,56		5. 7. 10,16			M
	(k) β Tauri.....	20,3	35,9	51,1	6,5	22,0	36,9	5. 16. 52,5			16. 6,46		6,34	29,53		5. 16. 35,86			M
	(k) Polaris SP.....	....	9,9	35,9	17,5	46,8	18,5	13. 29. 51,2			4. 13,23		7,71			13. 4. 37,58			M
	(g) Spica.....	54,8	8,2	21,8	35,4	49,0	3,1	13. 17. 16,6			16. 35,56		35,33	29,86		13. 17. 5,20			M
Dec. 10	α Aquarii.....	42,1	55,5	9,0	22,6	36,1	49,5	21. 58. 2,8			57. 22,51		22,32	30,12	0,98	21. 57. 52,48			M
	H. C. 43487.....	59,8	15,0	30,6	46,0	1,9	16,9	22. 9. 32,1			8. 46,04		45,92			22. 9. 16,08			M
	Piazzi XXII. 169..	51,9	5,1	13,4	31,9	45,6	58,9	22. 31. 12,8			30. 32,08		31,89			22. 31. 2,07			M
	(l) * N.P.D. 61°. 54'.	....	3,8	18,9	34,1	49,8	4,5	22. 33. 19,9			32. 34,19		34,07			22. 33. 4,25			M
	(m) * N.P.D. 62°. 5'.	....	55,8	10,9	25,6	40,4	55,8	22. 35.			35. 25,70		25,57			22. 35. 55,75			M
	(h) α Pegasi.....	54,1	8,2	22,0	36,0	50,1	4,0	22. 57. 17,9			56. 36,04		35,89	30,25		22. 57. 6,09			M
	(n) * N.P.D. 66°. 45'.	39,5	54,1	8,6	23,1	37,9	52,3	23. 15. 6,9			14. 23,20		23,06			23. 14. 53,27			M
	(o) α Andromedæ....	....	26,5	41,9	57,1	13,0	27,6	0. 0. 43,1			59. 57,23		57,11	30,22		0. 0. 27,35			M
Dec. 11	(o) α Arietis.....	16,9	31,5	46,1	0,9	15,9	30,1	1. 58. 44,5			58. 0,84		0,70	31,22	1,06	1. 58. 32,06			M
	α Ceti.....	4,1	17,5	30,9	44,4	57,9	11,5	2. 54. 25,0			53. 44,47		44,29	31,47		2. 54. 15,69			M
	(p) Aldebaran.....	54,1	8,1	22,0	36,3	50,2	3,9	4. 27. 18,1			26. 36,10		35,95	31,49		4. 27. 7,41			M
	(q) Rigel.....	58,1	11,8	25,2	38,6	52,8	6,2	5. 7. 19,8			6. 38,93		38,71	31,51		5. 7. 10,20			M
	m Orionis.....	34,5	47,9	1,5	15,1	28,6	42,1	5. 14. 55,5			14. 15,03		14,85			5. 14. 46,35			M
	(r) B. v. 399.....	56,6	10,2	23,8	37,1	50,9	4,4	5. 17. 17,6			16. 37,23		37,04			5. 17. 8,54			M
	* N.P.D. 83°. 33'.	19,2	32,6	46,5	59,8	13,8	26,9	5. 26. 40,5			25. 59,90		59,73			5. 26. 31,24			M
	(s) * N.P.D. 82°. 26'.	28,2	41,5	55,8	8,9	22,2	35,8	5. 34. 49,6			34. 8,86		8,69			5. 34. 40,21			M
	(q) α Orionis.....	39,8	53,4	7,2	20,6	34,8	47,5	5. 47. 1,6			46. 20,70		20,53	31,58		5. 46. 52,06			M
Dec. 12	o Pegasi.....	14,2	29,8	44,9	0,6	15,9	30,6	22. 34. 46,1			34. 0,30		0,23		1,05	22. 34. 32,54			M
	β Ceti.....	37,4	51,6	6,1	20,1	34,6	48,4	0. 36. 2,9			35. 20,15		19,91	32,25		0. 35. 52,31			M
	α Arietis.....	15,9	30,5	44,9	59,2	14,2	28,6	1. 58. 43,1			57. 59,49		59,40	32,51		1. 58. 31,86			M
	α Ceti.....	2,9	16,2	29,9	43,3	56,9	10,4	2. 54. 24,0			53. 43,37		43,22	32,54		2. 54. 15,72			M
	* N.P.D. 110°. 50'.	....	22,8	36,9	51,6	6,4	20,6	2. 56. 35,5			55. 51,77		51,52			2. 56. 24,02			M
	(t) Aldebaran.....	52,5	7,3	20,8	34,9	49,1	2,9	4. 27. 17,0			26. 34,93		34,82	32,63		4. 27. 7,38			M
Dec. 13	α Aquarii.....	38,7	51,9	5,4	19,1	32,7	45,9	21. 57. 59,4			57. 19,02		18,92	33,48	0,97	21. 57. 52,21			M
	(u) Piazzi. XXII. 169.	48,0	1,9	15,5	28,6	42,6	56,0	22. 31. 8,9			30. 28,79		28,69			22. 31. 2,00			M
	o Pegasi.....	13,1	28,6	44,0	58,9	14,8	29,6	22. 34. 44,9			33. 59,13		59,09			22. 34. 32,40			M
	(x) α Pegasi.....	51,0	5,3	18,9	32,8	47,0	0,6	22. 57. 14,8			56. 32,91		32,84	33,26		22. 57. 6,17			M
	(x) α Arietis.....	15,0	29,5	43,9	58,1	13,6	27,6	1. 58. 42,5			57. 58,60		58,55	33,36		1. 58. 32,00			M
	(t) Rigel.....	55,9	9,6	23,1	36,9	50,5	4,2	5. 7. 17,8			6. 36,86		36,72	33,52		5. 7. 10,30			M

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = - 0",09. LEVEL Error = - 0",34. From Dec. 12 = + 0",43. AZIMUTH Error = - 3",66. From Dec. 13 = - 2",51.

- (a) The N.P.D. is approximate. (b) The N.P.D. is only approximate. An equal star of the same N.P.D. precedes about two intervals. (c) Delayed by the lamp being out. All the wires except II and III have been corrected by + 1". (d) Not taken at the other wires on account of extreme unsteadiness and bad definition. (e) Faint from light clouds. Correction - 1" has been applied for error of counting. (f) Clouds. (g) Unsteadiness. (h) Radiation. (i) A great blur: the small star not distinguishable. (k) Bad definition. (l) A smaller follows 6". (m) Difficult, so faint. (n) Another of the same N.P.D. follows about 22". (o) Faint from cloud. (p) Haze. (q) Very loud wind. (r) A star of less N.P.D. precedes about 20". (s) Very faint. Two of greater N.P.D. follow. (t) Great radiation. (u) Unsteady. (x) Faint from cloud.

Month and Day.	NAME of OBJECT.	I.	II.	III.	IV.	V.	VI.	VII. Wire.	Minutes and Seconds of Concluded Transit.		Seconds of Meridian Transit.	Clock appa- rently Slow.	Adopt- ed losing Rate.	Apparent R.A. from the Observation.			Observer.
		s.	s.	s.	s.	s.	s.	h. m. s.	m. s.	s.	s.	s.	h. m. s.				
Dec. 13	(a) α Orionis.....	32,6	45,9	59,5	13,1	26,5	40,1	5. 14. 53,1	14. 12,97	12,87			0,97	5. 14. 46,45		M	
	B. v. 399.....	54,8	8,1	21,6	35,1	48,9	2,1	5. 17. 15,5	16. 35,16	35,06				5. 17. 8,64		M	
	(b) * N.P.D. 83°. 16'.	59,8	13,1	26,5	40,0	53,7	7,3	5. 28. 20,9	27. 40,18	40,10				5. 28. 13,70		M	
	(c) B. v. 925.....	30,3	43,8	56,4	11,0	25,7	39,0	5. 35. 52,6	35. 11,25	11,17				5. 35. 44,77		M	
	(d) α Orionis.....	37,9	51,1	5,1	18,8	32,0	45,6	5. 46. 59,4	46. 18,56	18,48	33,65			5. 46. 52,08		M	
Dec. 15	α Pegasi.....	49,0	2,9	17,1	30,9	45,0	58,6	22. 57. 12,5	56. 30,85	30,78	35,30	1,02	22. 57. 5,99		M		
	(e) β Ceti.....			3,5	17,1	31,4	45,1	0. 35. 59,9	35. 17,17	17,00	35,12		0. 35. 52,28		M		
	(f) Polaris.....	12,8	45,9	18,5	49,6	32,5	55,2	1. 29. 25,4	3. 51,41	56,34						M	
	B. I. 228.....				46,1		13,1	1. 14. 26,5	13. 46,06	45,95				1. 14. 21,25		M	
	(g) α Arietis.....	12,8	27,4	42,1	56,4	11,1	25,9	1. 58. 40,1	57. 56,55	56,50	35,39			1. 58. 31,83		M	
Dec. 19	(a) β Ceti.....		43,9	58,1	12,4	26,8	40,9	0. 35. 54,1	35. 12,25	12,11	39,95	1,05	0. 35. 52,08		M		
	(a) Polaris.....	4,4	37,9	10,2	41,0	22,6	49,4	1. 29. 16,1	3. 43,09	47,37						M	
	α Arietis.....	8,3	22,9	37,4	52,1	7,0	20,8	1. 58. 36,0	57. 52,07	52,04	39,82			1. 58. 32,07		M	
	α Ceti.....	55,1	8,8	22,1	35,9	49,6	2,9	2. 54. 16,4	53. 35,83	35,76	39,97			2. 54. 15,83		M	
	Aldebaran.....	45,2	59,0	13,1	27,2	41,6	55,1	4. 27. 9,4	26. 27,23	27,19	40,29			4. 27. 7,32		M	
	Rigel.....		2,8	16,1	30,0	43,9	57,6	5. 7. 11,2	6. 30,12	30,01	40,27			5. 7. 10,17		M	
	α Orionis.....	26,2	39,5	53,1	6,5	20,0	33,6	5. 14. 47,2	14. 6,59	6,51				5. 14. 46,68		M	
	(h) * N.P.D. 83°. 16'.	53,5	7,0	20,5	34,3	47,8	0,9	5. 28. 14,5	27. 34,07	34,01				5. 28. 14,19		M	
	(i) * N.P.D. 82°. 26'.	18,5	32,1	45,6	59,5	13,8	27,1	5. 34. 40,6	33. 59,60	59,54				5. 34. 39,72		M	
	α Orionis.....	31,2	45,1	58,5	12,1	25,5	39,1	5. 46. 52,6	46. 12,01	11,95	40,26			5. 46. 52,14		M	
	(k) H. C. 11457.....	33,1	46,9	0,5	13,9	28,0	41,1	5. 54. 54,8	54. 14,04	13,98				5. 54. 54,18		M	
	42 Aurigæ.....		49,8	9,1	28,5	48,6	7,5	6. 6. 27,5	5. 28,72	28,75				6. 6. 8,96		M	
Dec. 22	(l) B. XXII. 772.....	37,1	50,6	4,3	17,8	31,4	44,9	22. 35. 58,2	35. 17,76	17,66			0,92	22. 35. 59,86		M	
Dec. 23	(m) B. XXII. 1228.....				52,1	6,2	19,4	22. 57. 32,6	56. 52,37	52,27				22. 57. 35,40		M	
	(n) A Piscium.....	24,6	38,1	51,1	4,8			23. 0.	0. 4,88	4,78				23. 0. 47,91		M	
	β Ceti.....	26,2	40,1	54,9	9,1	23,6	37,1	0. 35. 51,6	35. 8,95	8,80	43,21			0. 35. 51,99		M	
	(o) Polaris.....	59,1				18,9	44,5	1. 29. 21,1	3. 40,22	43,71						M	
	(o) α Arietis.....	4,2	19,1	34,4			17,8	1. 58. 32,6	57. 48,54	48,48	43,34			1. 58. 31,73		M	
	(o) β Tauri.....					8,1	24,0	5. 16. 38,4	15. 52,80	52,75	43,27			5. 16. 36,12		M	
Dec. 24	Piazzi XXII. 169.....	37,6	51,1	4,6	18,2	31,8	44,9	22. 30. 58,4	30. 18,09	18,00			0,93	22. 31. 2,04		M	
	(l) B. XXII. 772.....	36,1	49,4	2,2	16,0	29,9	43,0	22. 35. 56,8	35. 16,20	16,10				22. 36. 0,15		M	
	(p) α Pegasi.....	40,1	53,9	7,6	21,9	36,0	49,9	22. 57. 3,6	56. 21,86	21,79	44,18			22. 57. 5,85		M	
	(a) A Piscium.....	23,9	37,1	50,4	3,6	17,5	30,9	23. 0. 44,5	0. 3,99	3,89				23. 0. 47,95		M	
	α Andromedæ.....			27,9	43,1	58,6	13,5	0. 0. 28,9	59. 43,11	43,06	44,07			0. 0. 27,16		M	
	α Arietis.....	3,9	18,6	33,1	47,8	2,5	17,0	1. 58. 31,6	57. 47,79	47,73	44,08			1. 58. 31,91		M	
Dec. 26	(q) α Arietis.....	2,1	16,9	31,4	46,0	0,9	14,8	1. 58. 29,5	57. 45,94	45,88	45,91	0,95				M	
Dec. 30	(q) α Andromedæ.....	51,1	6,3	21,6	36,9	52,3	7,5	0. 0. 22,8	59. 36,93	36,92	50,12	0,93	0. 0. 27,18		M		
	(r) Astræa.....	5,8	18,9	33,6	48,1	1,9	15,5	4. 4. 30,4	3. 47,75	47,71				4. 4. 38,13		M	
	Aldebaran.....	35,0	49,1	3,1	17,4	31,5	45,0	4. 26. 59,5	26. 17,23	17,20	50,29			4. 27. 7,63		M	
	(s) Rigel.....	39,1	52,9	6,3	19,8	33,8	46,9	5. 7. 0,8	6. 19,95	19,86	50,45			5. 7. 10,32		M	
	(s) β Tauri.....	59,1	14,8	30,3	45,1	0,9	15,9	5. 16. 31,0	15. 45,30	45,29	50,77			5. 16. 35,76		M	
	α Orionis.....	20,9	34,8	48,1	1,7	15,6	28,8	5. 46. 42,6	46. 1,78	1,74	50,56			5. 46. 52,22		M	
	55 Aurigæ.....	7,9	26,8	45,4	4,6	23,9	42,6	6. 32. 1,4	31. 4,66	4,69				6. 31. 55,20		M	
	56 Aurigæ.....	54,6	13,1	31,8	50,3	9,2	27,4	6. 35. 46,6	34. 50,42	50,45				6. 35. 40,97		M	
	(d) Sirius.....	51,2	5,5	19,2	33,6	48,1	1,9	6. 38. 15,9	37. 33,63	33,52	50,42			6. 38. 24,04		M	
	H. C. 13381.....	41,8	0,1	17,9	36,2	54,9	12,8	6. 48. 31,0	47. 36,39	36,41				6. 48. 26,93		M	
Dec. 31	(t) δ Ursæ Minoris...	20,1	6,5	....	38,6	28,3	....	18. 24.	20. 40,05	41,70						M

ILLUMINATED END OF AXIS EAST. COLLIMATION Error = - 0",09. LEVEL Error = + 0",43. From Dec. 22 = + 0",04. From Dec. 30 = + 0",40. AZIMUTH Error = - 2",51. From Dec. 19 = - 2",07. From Dec. 30 = - 1",76.

(a) Unsteady. (b) Very faint. (c) The last of three nearly in a line. (d) Great radiation. (e) Indefinite. (f) Faint from cloud. (g) The night was too cloudy for small stars. (h) Star very faint and wind high. The N.P.D. may be inaccurate 1' or 2'. (i) Two faint stars of greater N.P.D. follow. (k) An equal star of greater N.P.D. precedes 10". (l) Without illumination of the field. (m) Cloudy at intervals. The correction - 1" has been applied for error of counting. (n) Very faint at Wire IV, then hid. (o) All much clouded. (p) Confused by the pencil breaking. (q) Loud wind. (r) Very faint, would hardly bear illumination. (s) Obscured by mist. (t) Extremely faint: cloudy at times and wind very high.

MEAN RIGHT ASCENSIONS OF THE STARS

OBSERVED IN THE YEAR 1845,

AS DEDUCED FROM EACH DAY'S OBSERVATION;

WITH

A CATALOGUE

OF THE

CONCLUDED MEAN RIGHT ASCENSIONS,

JANUARY 1, 1845.

Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
α ANDROMEDÆ.			B. o. 962.			POLARIS, continued.			B. i. 237.		
Sept. 12	-4,56	0. 0. 23,07	Sept. 18	-4,08	0. 54. 31,25	Nov. 1	-77,35	1. 3. 33,63	Oct. 7	-4,30	1. 14. 42,04
19	-4,62	23,17	26	-4,17	31,22	17	-72,53	37,93	10	-4,32	41,99
22	-4,63	23,17	27	-4,17	31,31	20	-71,11	35,83	13	-4,34	42,30
23	-4,64	23,21	* N.P.D. 99°. 29'.			21	-70,30	36,05	16	-4,35	42,26
30	-4,66	23,16				22	-70,02	36,36	Nov. 10	-4,37	41,98
Oct. 7	-4,68	23,30	Sept. 27	-4,19	0. 58. 10,28	Dec. 1	-65,72	37,68	Dec. 6	-4,23	42,19
10	-4,68	23,17	28 Ceti.			1	-65,42	37,57	H. C. 2553.		
11	-4,67	23,25	Sept. 18	-4,08	0. 58. 18,60	7	-61,41	36,00	Sept. 30	-4,25	1. 16. 27,57
14	-4,67	23,25	30	-4,20	18,41	8	-60,82	36,54	Oct. 9	-4,33	27,54
Nov. 1	-4,57	23,25	Oct. 3	-4,22	18,66	9	-60,53	37,04	11	-4,34	27,63
17	-4,43	23,18	9	-4,26	18,56	9	-60,24	37,34	Nov. 18	-4,37	27,76
19	-4,41	23,21	ϵ Piscium.			B. i. 51.			19	-4,36	27,61
Dec. 1	-4,26	23,20	Nov. 14	-4,45	1. 0. 23,45	Oct. 9	-4,27	1. 3. 54,25	20	-4,36	27,82
5	-4,21	23,38	17	-4,43	23,21	Nov. 19	-4,25	53,81	Dec. 3	-4,28	27,64
6	-4,19	23,17	η Ceti.			36 Ceti.			5	-4,26	27,54
10	-4,14	23,21	Sept. 26	-4,16	1. 0. 47,50	Oct. 3	-4,24	1. 4. 59,47	B. i. 276.		
24	-3,94	23,22	30	-4,19	47,61	11	-4,30	59,43	Oct. 3	-4,30	1. 16. 46,57
30	-3,85	23,33	Oct. 3	-4,22	47,65	16	-4,32	59,85	14	-4,38	46,54
Σ 8.			32 Ceti.			Dec. 3	-4,16	59,60	16	-4,39	46,64
Sept. 18	-4,09	0. 3. 37,97	Oct. 3	-4,22	47,65	6	-4,14	59,46	Nov. 10	-4,42	46,40
23	-4,13	38,02	β CETI.			37 Ceti.			* N.P.D. 33°. 36'.		
27	-4,18	38,41	Sept. 26	-4,16	1. 0. 47,50	Sept. 26	-4,17	1. 6. 35,52	Nov. 18	-6,71	1. 22. 53,89
			30	-4,19	47,61	Oct. 9	-4,27	35,64	19	-6,69	53,97
			Oct. 3	-4,22	47,65	13	-4,29	35,66	Dec. 6	-6,45	54,18
			32 Ceti.			14	-4,30	35,67	B. i. 497.		
			Oct. 3	-4,23	1. 2. 25,57	B. i. 186.			Oct. 3	-4,36	1. 28. 25,33
			11	-4,28	25,40	Oct. 3	-4,25	1. 11. 46,85	9	-4,42	25,38
			Nov. 14	-4,26	25,52	7	-4,28	46,84	13	-4,45	25,39
			POLARIS.			9	-4,30	47,02	14	-4,46	25,32
			Mar. 14	+24,74	1. 3. 35,55	10	-4,30	47,06	16	-4,47	25,43
			20	+26,27	35,30	B. i. 223.			B. i. 568.		
			20	+26,42	35,24	Oct. 3	-4,27	1. 13. 50,21	Oct. 3	-4,38	1. 32. 4,44
			21	+26,56	37,67	Nov. 3	-4,39	50,26	9	-4,44	4,55
			28	+27,31	31,52	18	-4,35	50,32	13	-4,47	4,36
			28	+27,29	32,06	19	-4,34	50,06	Nov. 3	-4,56	4,51
			29	+27,29	32,71	Dec. 3	-4,25	50,26	14	-4,56	4,36
			Apr. 1	+27,47	31,04	B. i. 228.			B. i. 576.		
			2	+27,51	31,98	Oct. 9	-4,30	1. 14. 17,03	Sept. 30	-4,38	1. 32. 17,13
			21	+24,69	33,10	11	-4,32	16,99	Oct. 7	-4,45	17,01
			22	+24,49	32,82	14	-4,33	16,98	11	-4,49	17,18
			22	+24,29	32,72	Dec. 5	-4,22	16,93	14	-4,51	17,23
			May 13	+14,75	30,22	15	-4,13	17,12	16	-4,53	17,45
			14	+14,51	30,20	B.A.C. 549.					
			26	+6,45	33,50				Nov. 14	-4,85	1. 39. 57,65
			27	+6,16	33,48				17	-4,85	57,72
			June 8	-3,33	36,84						
			9	-3,68	36,37						
			9	-4,04	35,80						
			Oct. 10	-78,80	36,05						
			13	-78,72	34,57						
			13	-78,73	33,47						
			14	-78,75	33,40						
			31	-77,46	35,05						
			31	-77,41	34,33						
ϕ^3 Ceti.											
Sept. 18	-4,09	0. 48. 15,25									
26	-4,17	15,01									
27	-4,18	15,20									
* N.P.D. 103°. 5'.											
Oct. 3	-4,22	0. 49. 50,39									
7	-4,24	50,17									
9	-4,25	50,26									
11	-4,25	50,21									
ϕ^4 Ceti.											
Sept. 18	-4,09	0. 50. 58,21									
27	-4,18	58,24									
30	-4,20	58,19									

Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
B. I. 736.			α CETI.			ρ Orionis.			β TAURI continued.		
Oct. 3	-4.42	1.40.32.53	Feb. 6	-1.30	2.54.10.88	Jan. 30	-2.07	5.5.11.59	Nov. 18	-5.64	5.16.29.90
7	-4.46	32.41	11	-1.22	10.98				20	-5.68	29.90
9	-4.48	32.39	21	-1.06	11.12				Dec. 6	-5.97	30.02
10	-4.49	32.41	Nov. 3	-4.64	10.95				9	-6.01	29.85
11	-4.50	32.31	18	-4.75	10.96				23	-6.16	29.96
31	-4.63	32.43	19	-4.76	11.00				30	-6.20	(29.56)
B.A.C. 609.			Dec. 20	-4.76	10.95				B. v. 399.		
Oct. 13	-4.62	1.51.8.57	Dec. 1	-4.79	11.00	Jan. 21	-2.07	5.7.5.47	Mar. 3	-1.69	5.17.3.40
14	-4.63	8.53	3	-4.79	10.94	Feb. 12	-1.81	5.61	Dec. 11	-5.09	3.45
31	-4.75	8.65	5	-4.79	10.96	Mar. 5	-1.44	5.41	13	-5.12	3.52
Nov. 3	-4.76	8.35	6	-4.79	10.89	Apr. 4	-0.91	5.41			
14	-4.78	8.51	11	-4.78	10.91	5	-0.90	5.39			
B. I. 988.			12	-4.78	10.94	8	-0.86	5.43			
Sept. 30	-4.45	1.54.60.14	19	-4.75	11.08	22	-0.68	5.49			
Oct. 3	-4.49	60.26	* N.P.D. 110°. 50'			May 2	-0.59	5.52			
7	-4.54	(59.86)	Dec. 12	-4.23	2.56.19.79	Nov. 18	-4.44	5.56			
9	-4.56	60.19				20	-4.47	5.42			
10	-4.57	60.19	ζ Arietis.			Dec. 6	-4.69	5.37			
B.A.C. 632.			Jan. 1	-2.03	3.6.0.23	9	-4.72	5.44			
Nov. 10	-4.94	1.55.13.09				11	-4.73	5.47			
* N.P.D. 78°. 50'.			α Persei.			13	-4.75	5.55			
Oct. 11	-4.59	1.57.24.85	Jan. 1	-2.87	3.13.16.98	19	-4.79	5.38			
14	-4.62	24.62	Feb. 3	-2.20	17.35	30	-4.82	5.50			
α ARIETIS.			η Tauri.			B. v. 303.					
Jan. 20	-1.40	1.58.(26.56)	Jan. 1	-2.23	3.38.16.99	Jan. 21	-2.21	5.13.9.26	B. v. 623.		
Mar. 6	-0.77	27.11							Feb. 17	-1.99	5.24.57.24
Sept. 26	-4.67	26.73	ω^s Tauri.			B. v. 324.			Mar. 3	-1.76	57.30
30	-4.74	26.87	Feb. 21	-1.68	4.8.11.29	Mar. 3	-1.69	5.13.55.47	α Leporis.		
Oct. 3	-4.78	26.78				4	-1.67	55.48	Mar. 11	-1.33	5.25.53.79
7	-4.84	26.86	ALDEBARAN.			7	-1.62	55.68	14	-1.27	53.97
Nov. 1	-5.07	26.93	Feb. 12	-1.89	4.27.1.91	B.A.C. 1661.			* N.P.D. 83°. 33'.		
3	-5.08	26.95	17	-1.81	1.89	Jan. 24	-2.19	5.13.57.12	Mar. 4	-1.75	5.26.26.15
14	-5.11	26.95	28	-1.62	1.97	m Orionis. <i>sp.</i>			8	-1.68	26.39
17	-5.11	26.71	Mar. 4	-1.54	1.81	Dec. 11	-5.07	5.14.41.28	Dec. 11	-5.17	26.07
18	-5.11	26.86	6	-1.51	1.97	13	-5.10	41.35	* N.P.D. 83°. 21'.		
19	-5.11	26.87	29	-1.13	2.15	19	-5.15	41.53	Mar. 7	-1.70	5.27.3.60
20	-5.11	26.96	Apr. 4	-1.04	2.09	m Orionis. $\eta f.$			* N.P.D. 83°. 16'.		
Dec. 1	-5.08	26.90	19	-0.89	2.00	Feb. 17	-1.90	5.14.42.38	Dec. 13	-5.20	5.28.8.50
3	-5.08	27.03	Nov. 18	-5.20	1.96	β TAURI.			19	-5.26	8.93
5	-5.07	26.74	Dec. 9	-5.44	1.99	Jan. 21	-2.63	5.16.29.97	ζ Tauri.		
6	-5.06	26.86	11	-5.45	1.96	Feb. 7	-2.44	30.11	Feb. 12	-2.29	5.28.23.20
9	-5.05	26.93	12	-5.46	1.92	Mar. 4	-2.01	29.90	B. v. 802.		
11	-5.03	27.03	19	-5.49	1.83	20	-1.69	29.85	Jan. 24	-2.30	5.31.21.52
12	-5.02	26.84	30	-5.50	2.13	29	-1.52	29.97	* N.P.D. 82°. 26'.		
13	-5.02	26.98	ι Aurigæ			Apr. 4	-1.42	29.83	Dec. 11	-5.20	5.34.35.01
15	-5.00	26.83	Jan. 21	-2.61	4.46.54.35	5	-1.40	29.82	19	-5.29	34.43
19	-4.97	27.10				17	-1.22	29.81			
23	-4.93	26.80				19	-1.20	29.96			
24	-4.92	26.99				22	-1.16	29.84			
H. C. 4925.						May 2	-1.08	29.95			
Feb. 6	-1.30	2.31.34.23									

Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
B. v. 925.			15 Geminorum.			Σ 1037.			POLLUX continued.		
Mar. 7	-1,76	5.35.39,48	Feb. 6	-2,57	6.18.32,31	Feb. 6	-2,83	7.3.10,30	Jan. 27	-2,88	7.35.49,50
8	-1,74	39,49	21	-2,38	32,26				29	-2,89	49,52
Dec. 13	-5,22	39,55	Mar. 4	-2,21	32,49	δ Geminorum.			Feb. 7	-2,89	49,57
B. v. 1015.			γ Geminorum.			Jan. 7	-2,63	7.10.51,70	17	-2,83	49,50
Jan. 24	-2,34	5.39.30,63	Jan. 21	-2,59	6.28.45,20	CASTOR. <i>sp.</i>			21	-2,80	49,44
Feb. 17	-2,08	30,16	Feb. 6	-2,53	45,53	Jan. 21	-2,96	7.24.41,59	24	-2,77	49,51
α ORIONIS.			55 Aurigæ.			24	-2,97	42,02	28	-2,72	49,54
Jan. 21	-2,37	5.46.46,83	Dec. 30	-7,30	6.31.47,90	27	-2,98	41,67	Mar. 1	-2,71	49,46
24	-2,35	46,70	Σ 953.			29	-2,98	41,68	6	-2,64	49,38
Feb. 6	-2,25	46,65	Jan. 21	-2,51	6.32.41,16	Feb. 6	-2,97	42,10	8	-2,61	49,40
7	-2,24	46,63	Feb. 6	-2,44	40,78	8	-2,97	41,82	12	-2,55	49,23
8	-2,23	46,91	56 Aurigæ.			11	-2,95	41,56	24	-2,33	49,34
11	-2,20	46,94	Dec. 30	-7,19	6.35.33,78	24	-2,83	41,74	Apr. 2	-2,16	49,25
12	-2,18	46,87	SIRIUS.			28	-2,78	41,70	7	-2,07	49,37
17	-2,11	47,02	Jan. 21	-2,34	6.38.19,30	Mar. 1	-2,76	41,81	8	-2,05	49,37
21	-2,05	46,62	24	-2,33	19,47	6	-2,69	41,73	16	-1,90	49,42
Mar. 8	-1,80	46,87	Feb. 6	-2,25	19,22	8	-2,65	41,67	17	-1,88	49,44
11	-1,75	46,81	7	-2,24	19,27	12	-2,59	41,72	22	-1,78	49,29
13	-1,71	46,94	8	-2,23	19,29	Apr. 2	-2,18	41,87	23	-1,77	49,38
24	-1,52	47,15	11	-2,20	19,35	7	-2,07	41,83	June 21	-1,27	49,34
28	-1,45	46,97	Mar. 4	-1,88	19,36	8	-2,05	42,12	6 Cancri.		
31	-1,40	46,91	12	-1,74	19,28	17	-1,88	41,76	Jan. 7	-2,67	7.53.59,59
Apr. 2	-1,36	46,86	24	-1,51	19,07	22	-1,78	41,94	18	-2,82	59,38
Dec. 11	-5,19	46,87	31	-1,37	19,32	ν Geminorum.			21	-3,21	59,03
13	-5,21	46,87	Apr. 3	-1,31	19,34	Jan. 7	-2,71	7.26.21,86	μ^1 Cancri.		
19	-5,29	46,85	5	-1,27	19,32	Feb. 21	-2,77	22,07	Jan. 21	-2,76	7.57.7,23
30	-5,38	46,84	7	-1,24	19,25	PROCYON.			24	-2,78	6,88
B. v. 1359.			8	-1,22	19,26	Jan. 21	-2,54	7.31.11,05	29	-2,80	6,90
Jan. 30	-2,36	5.52.48,83	16	-1,07	19,25	24	-2,55	11,10	ρ Argûs.		
Feb. 6	-2,30	48,18	Aug. 21	-1,53	19,15	27	-2,55	11,10	Jan. 18	-2,48	8.0.56,56
1 Geminorum.			Dec. 30	-4,72	19,32	29	-2,56	11,03	Σ 1200.		
Feb. 6	-2,52	5.54.41,93	H. C. 13381.			Feb. 7	-2,55	10,94	Jan. 24	-3,63	8.4.34,25
17	-2,38	41,89	Dec. 30	-7,05	6.48.19,88	17	-2,49	11,14	29	-3,66	34,30
H. C. 11457.			H. C. 13540.			21	-2,46	11,09	B. VIII. 228.		
Dec. 19	-5,34	5.54.48,84	Jan. 7	-2,69	6.52.31,53	24	-2,43	11,02	Apr. 4	-2,03	8.9.8,56
42 Aurigæ.			Σ 1033.			28	-2,38	11,03	B. VIII. 241.		
Dec. 19	-7,35	6.6.1,61	Jan. 7	-3,74	7.2.32,37	Mar. 1	-2,37	10,99	Apr. 7	-1,96	8.9.34,87
H. C. 12053.			POLLUX.			6	-2,30	10,96	H. C. 16341.		
Feb. 6	-2,55	6.11.15,95	Jan. 21	-2,86	7.35.49,53	8	-2,28	11,05	Apr. 4	-2,04	8.12.35,94
B.A.C. 2038.			24	-2,87	49,22	12	-2,22	11,25	Piazzi VIII. 49.		
Mar. 12	-2,05	6.11.58,36	POLLUX.			24	-2,03	11,10	Apr. 7	-1,99	8.14.7,96
13	-2,03	57,95	Jan. 7	-3,74	7.2.32,37	7	-1,79	11,20			

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	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
21 Cancrī.			H. C. 17526.			α HYDRÆ continued.			Σ 1397.		
Apr. 4	-2,12	8.15.26,14	Mar. 8	-3,22	8.45.44,04	Mar. 17	-2,52	9.19.58,29	Mar. 8	-2,87	9.47.56,63
B. VIII. 466.			11	-3,18	43,75	28	-2,41	58,32	13	-2,84	56,34
Apr. 7	-2,01	8.17.32,52	ρ^3 Cancrī.			29	-2,40	58,10	17	-2,82	56,62
Piazzi VIII. 70.			Jan. 24	-2,80	8.46.22,15	Apr. 19	-2,11	58,17	Σ_2 210.		
Apr. 2	-2,14	8.18.24,35	Feb. 3	-2,89	22,17	21	-2,08	58,38	Mar. 8 -3,36 9.52.47,35		
4	-2,11	24,16	ι Ursæ Majoris.			May 2	-1,92	58,21	13	-3,32	47,17
η Cancrī.			Jan. 18	-3,27	8.48.34,08	27	-1,59	58,27	17	-3,29	47,51
Jan. 18	-2,65	8.23.44,52	σ^2 Cancrī.			ω Leonis.			Σ 1404.		
24	-2,72	44,57	Jan. 24	-2,62	8.48.55,62	Mar. 20	-2,58	9.20.9,06	Mar. 11	-2,68	9.56.22,96
B. VIII. 626.			Feb. 3	-2,70	55,63	24	-2,52	8,88	24	-2,60	23,13
Apr. 4	-2,19	8.23.47,93	Σ 1332.			Apr. 17	-2,21	9,02	28	-2,57	22,83
B. VIII. 644.			Mar. 24	-2,63	9.8.22,02	λ Leonis.			REGULUS.		
Apr. 2	-2,20	8.24.35,77	Apr. 16	-2,29	21,86	Jan. 20	-2,56	9.22.52,19	Feb. 8	-2,63	10.0.6,62
B.A.C. 2872.			17	-2,27	21,97	Feb. 19	-2,85	52,35	17	-2,71	6,65
Apr. 5	-2,18	8.25.9,66	Σ 3121.			B. IX. 627.			19	-2,72	6,74
* N.P.D. 76°.32'.			Mar. 20	-2,76	9.8.40,54	Apr. 16	-2,24	9.27.57,68	Mar. 13	-2,73	6,86
Apr. 2	-2,24	8.29.48,62	B. IX. 298.			2 Sextantis.			17	-2,71	6,58
Piazzi VIII. 131. <i>np</i> .			Apr. 17	-2,12	9.13.54,24	Mar. 28	-2,50	9.30.22,12	20	-2,69	6,74
Feb. 21	-3,58	8.32.25,00	Σ_2 201.			Σ_2 205.			24	-2,66	6,80
Piazzi VIII. 131. <i>sf</i> .			Mar. 20	-2,76	9.14.46,75	Mar. 8	-3,19	9.32.47,19	28	-2,63	6,67
Feb. 3	-3,59	8.32.25,62	24	-2,71	46,59	13	-3,14	47,05	29	-2,62	6,66
H. C. 17139.			Apr. 14	-2,39	46,72	ϕ Ursæ Majoris.			31	-2,60	6,72
Apr. 2	-2,29	8.34.9,84	Σ 1348.			Mar. 8	-3,73	9.41.31,11	Apr. 2	-2,58	6,69
ϵ HYDRÆ.			Jan. 20	-2,18	9.16.18,72	13	-3,68	30,92	3	-2,57	6,64
Feb. 21	-2,63	8.38.33,86	Mar. 8	-2,64	18,44	17	-3,61	30,99	5	-2,55	6,81
Mar. 5	-2,56	33,93	A Hydræ.			B. IX. 929.			21	-2,35	6,73
11	-2,51	33,90	Apr. 16	-2,15	9.17.38,87	Mar. 29	-2,59	9.42.25,25	23	-2,32	6,73
13	-2,49	33,79	α HYDRÆ.			23 Leonis.			26	-2,28	6,55
Apr. 8	-2,14	33,96	Jan. 20	-2,40	9.19.(57,98)	Apr. 5	-2,50	9.42.38,35	May 12	-2,07	6,73
19	-1,96	33,98	24	-2,46	58,48	14	-2,38	38,37	June 5	-1,78	6,77
21	-1,93	34,00	Feb. 19	-2,65	58,24	H. C. 19371.			Σ_2 213.		
26	-1,85	33,92	Mar. 5	-2,61	58,35	Mar. 28	-2,61	9.45.21,84	Mar. 8	-2,91	10.4.22,08
			8	-2,59	58,27	Apr. 2	-2,55	21,98	11	-2,90	22,09
			11	-2,58	58,39	5	-2,52	22,01	13	-2,89	21,97
			13	-2,56	58,28	14	-2,40	21,87	17	-2,87	22,19
									B.A.C. 3506.		
									Mar. 17	-2,77	10.7.48,89
									20	-2,75	49,05
									24	-2,72	49,14
									γ Leonis.		
									Mar. 17	-2,79	10.11.25,14
									20	-2,78	25,19
									24	-2,74	25,20

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	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
B.A.C. 3529.			Σ_2 228.			δ LEONIS.			e Leonis.		
Mar. 11	-2,73	10.12.25,37	Apr. 3	-2,74	10.38.51,93	Feb. 21	-2,68	11. 5.51,62	Feb. 5	-2,36	11.22.23,51
28	-2,64	25,44	21	-2,55	52,11	Mar. 8	-2,80	51,56	19	-2,60	23,84
31	-2,62	25,38	23	-2,53	52,07	17	-2,82	51,46	Mar. 17	-2,80	23,84
Σ_2 217.			Piazzi X. 179.			31	-2,79	51,35	Σ_2 234.		
Mar. 8	-2,80	10.18.30,20	Mar. 8	-2,76	10.44. 5,50	Piazzi XI. 14.			Mar. 20	-3,08	11.22.25,59
11	-2,80	29,79	28	-2,72	5,43	Apr. 23	-2,73	11. 6.32,34	31	-3,04	25,52
28	-2,71	30,17	31	-2,70	5,43	Σ 1521.			Apr. 21	-2,84	25,46
Σ_2 218.			Σ 1496.			Mar. 20			H. C. 21896.		
Mar. 31	-2,63	10.19.29,48	Mar. 8	-2,77	10.50. 8,49	Mar. 20	-2,88	11. 7. 1,71	Apr. 19	-2,72	11.23.42,43
Apr. 2	-2,61	29,44	28	-2,75	8,55	n Leonis.			22	-2,69	42,26
3	-2,60	29,48	31	-2,73	8,37	Mar. 28			May 3	-2,57	42,54
Σ 1439.			B. x. 916.			Apr. 21	-2,61	45,23	Σ 1558.		
Feb. 17	-2,75	10.21.37,11	Apr. 22	-2,55	10.50.19,29	75 Leonis.			Mar. 17	-2,82	11.28.35,71
Σ 1445.			Σ 1500.			Apr. 5	-2,75	11. 9.18,77	20	-2,83	35,54
Mar. 8	-2,73	10.24.47,77	Apr. 23	-2,55	10.52. 8,23	21	-2,61	18,74	31	-2,82	35,56
28	-2,66	47,81	May 3	-2,44	8,19	Piazzi XI. 27.			B. xi. 687.		
Apr. 3	-2,62	47,88	Σ 1506.			Mar. 28	-3,09	11. 9.53,33	Mar. 17	-2,78	11.38.50,06
48 Leonis.			Mar. 31	-2,74	10.56.50,72	31	-3,06	53,36	19	-2,79	50,48
Feb. 17	-2,66	10.26.42,74	Apr. 21	-2,59	50,76	Apr. 2	-3,05	53,25	20	-2,79	50,24
21	-2,69	42,81	23	-2,57	50,60	3	-3,04	53,38	B. xi. 701.		
Σ 1457.			B. x. 1053.			ξ Ursæ Majoris.			Feb. 5	-2,28	11.39.39,48
Feb. 17	-2,65	10.30.38,87	Feb. 21	-2,65	10.58. 7,07	Apr. 22	-2,67	11. 9.53,92	β LEONIS.		
B.A.C. 3649.			Σ_2 231.			23	-2,66	53,77	Feb. 19	-2,52	11.41. 9,07
Mar. 8	-2,76	10.31.34,75	Mar. 31	-2,87	11. 2.33,18	May 2	-2,54	53,83	Mar. 17	-2,77	8,97
28	-2,70	34,99	Apr. 3	-2,85	33,25	Σ 1534.			31	-2,80	9,05
Apr. 3	-2,65	34,85	21	-2,68	33,22	Mar. 20	-2,81	11.13.41,88	Apr. 2	-2,80	9,11
Σ 1465.			B.A.C. 3831.			Apr. 23	-2,63	41,73	3	-2,79	9,11
Mar. 28	-3,14	10.34. 4,72	Apr. 22	-2,62	11. 5.31,92	May 3	-2,53	42,09	5	-2,79	9,04
Apr. 21	-2,77	5,00	May 3	-2,50	32,04	Σ 1535.			21	-2,71	8,89
23	-2,74	4,66	5	-2,47	31,94	Apr. 22	-2,64	11.14.57,40	22	-2,70	8,91
Σ 1470.			p^5 Leonis.			May 5	-2,52	57,24	May 2	-2,62	8,99
Mar. 8	-2,75	10.38.23,04	Mar. 28	-2,77	11. 5.49,61	ι Leonis.			9	-2,56	8,94
28	-2,71	23,13	Apr. 5	-2,73	49,54	Mar. 20	-2,79	11.15.50,30	12	-2,53	8,94
31	-2,69	22,90	Piazzi XI. 181.			Apr. 23	-2,63	50,36	Σ 1576.		
						May 3	-2,52	50,55	Apr. 22	-2,77	11.44.50,53
									23	-2,76	50,76
									May 5	-2,63	50,81
									Piazzi XI. 181.		
						Mar. 31	-3,20	11.46.35,84	Mar. 31	-3,20	11.46.35,84
						Apr. 2	-3,19	35,91	Apr. 2	-3,19	35,91
						3	-3,19	35,92	3	-3,19	35,92

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	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
Σ 1582.			β CORVI continued.			k Virginis.			SPICA.		
Mar. 17	-2,80	11.48.24,40	Apr. 2	-3,13	12.26.15,45	Apr. 23	-2,98	12.51.40,57	Mar. 28	-2,95	13.17.2,09
			7	-3,15	15,40	May 9	-2,94	40,71	Apr. 7	-3,04	1,84
* N.P.D. 39°. 33'.			8	-3,15	15,26	14	-2,92	40,73	16	-3,09	1,93
Apr. 2	-3,20	11.52.27,50	24	-3,14	15,54	Σ 1719.			19	-3,10	2,00
3	-3,20	27,57	May 3	-3,11	15,47				22	-3,11	1,99
Σ 3078.			17	-3,02	15,40				23	-3,11	2,09
Apr. 2	-2,82	12.1.22,07	June 4	-2,86	15,37				26	-3,12	2,24
24	-2,76	22,29	Σ 1658.			Apr. 7	-2,91	12.59.25,31	May 9	-3,12	2,13
May 2	-2,71	22,12	Apr. 19	-2,85	12.27.13,99	g Virginis.			12	-3,12	2,21
Σ 1604.			26	-2,83	14,08				17	-3,10	2,16
Apr. 19	-2,90	12.1.27,96	B. XII. 473.			Apr. 16	-3,06	12.59.46,86	26	-3,06	2,16
May 3	-2,90	27,91	Apr. 22	-2,99	12.27.50,73	19	-3,06	46,96	27	-3,06	2,10
5	-2,89	27,94	B. XII. 464.			Σ , 260.			June 5	-3,00	2,17
Σ 1606.			May 5	-2,95	12.27.30,74	Apr. 8	-2,84	13.0.36,74	11	-2,96	2,19
Mar. 17	-2,95	12.2.56,83	9	-2,93	31,05	23	-2,85	36,69	Dec. 9	-3,09	2,11
Σ 1619.			γ Virginis.			24	-2,85	36,79	Σ , 266.		
Mar. 17	-2,84	12.7.11,78	Apr. 7	-2,91	12.33.48,44	53 Virginis.			May 1	-2,89	13.20.52,63
20	-2,86	11,61	19	-2,92	48,77	Apr. 7	-3,10	13.3.49,05	3	-2,89	52,71
28	-2,89	11,86	Σ 1678.			Σ 1733.			9	-2,88	52,77
Σ 1634.			Apr. 2	-2,82	12.37.40,32	Apr. 7	-2,83	13.8.44,27	B.A.C. 4530.		
Mar. 17	-2,77	12.12.53,24	7	-2,84	40,20	H. C. 24639.			Apr. 24	-3,01	13.26.22,22
H. C. 23136.			19	-2,84	40,23	Apr. 16	-2,86	13.8.53,89	May 3	-3,02	22,45
Mar. 20	-2,80	12.13.16,82	35 Comæ.			19	-2,87	53,93	9	-3,02	22,25
28	-2,83	17,02	Apr. 2	-2,80	12.45.39,75	* N.P.D. 30°. 59'.			ζ Virginis.		
Apr. 3	-2,85	17,09	8	-2,84	39,70	Apr. 8	-3,27	13.10.0,89	Apr. 16	-2,97	13.26.47,81
H. C. 23132.			23	-2,84	39,60	May 3	-3,13	1,02	19	-3,00	47,84
Apr. 2	-2,84	12.13.38,01	B.A.C. 4336.			Σ 1734.			Σ 1776.		
B.A.C. 4218.			Apr. 19	-2,88	12.47.20,21	Apr. 7	-2,89	13.12.50,04	Apr. 16	-2,95	13.35.23,00
Mar. 20	-2,77	12.22.41,19	* N.P.D. 81°. 19'.			H. C. 24744.			Σ 1781.		
28	-2,82	41,45	May 17	-2,79	12.47.25,11	Apr. 24	-2,87	13.12.41,64	Apr. 22	-2,96	13.38.20,08
Apr. 2	-2,83	41,33	Σ 1690.			Σ 1737.			May 1	-2,99	20,15
8	-2,84	41,30	Apr. 7	-2,95	12.48.15,68	Apr. 24	-2,88	13.14.15,18	2	-2,71	20,39
19	-2,83	41,17	Σ 1699.			May 2	-2,87	15,20	Σ , 273.		
β CORVI.			Apr. 8	-2,85	12.51.12,15	3	-2,87	15,29	Apr. 22	-2,97	13.48.33,05
Mar. 17	-3,03	12.26.15,50	24	-2,84	12,11	Σ 1805.			24	-2,98	33,25
20	-3,06	15,32	May 3	-2,81	11,93	Apr. 24	-3,00	14.2.9,26	May 2	-3,01	33,41
28	-3,11	15,34	Σ 1823.			May 2	-3,04	9,28	Σ 1823.		
						3	-3,04	9,35			
									May 30	-2,99	14.8.13,93

Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
ARCTURUS.			α^2 Libræ.			42 Libræ.			η Draconis.		
Mar. 20	-2,46	14. 8. 35,55	May 17	-3,49	14. 42. 18,59	May 12	-3,73	15. 31. 7,51	July 31	-1,77	16. 21. 54,16
Apr. 24	-2,87	35,53	* N.P.D. 27°. 47'.			17	-3,77	7,76	Σ 2052.		
26	-2,88	35,72				η Libræ.			May 26	-3,13	16. 22. 3,66
May 2	-2,90	35,60	May 9	-3,13	14. 44. 0,18	May 26	-3,65	15. 35. 21,75	* N.P.D. 30°. 14'.		
3	-2,90	35,58	22	-3,03	0,25	June 13	-3,71	21,82	June 13	-3,07	16. 46. 32,25
9	-2,92	35,70	June 4	-2,81	0,38	γ CORONÆ BOREALIS.			Σ 2120.		
22	-2,91	35,63	Σ 1921.			June 4	-3,04	15. 36. 14,58	July 31	-2,95	16. 58. 37,05
June 4	-2,85	35,68	May 17	-2,92	15. 6. 3,65	19	-3,01	14,15	Aug. 1	-2,94	36,95
5	-2,84	35,57	Σ 1931.			20	-3,01	14,23	η Ophiuchi.		
9	-2,82	35,65	May 17	-3,10	15. 11. 16,08	α SERPENTIS.			July 31	-3,90	17. 1. 29,51
11	-2,80	35,64	22	-3,14	16,14	May 17	-3,17	15. 36. 38,30	α HERCULIS.		
13	-2,78	35,60	Σ 1934.			22	-3,22	38,32	Jan. 20	-0,02	17. 7. (35,25)
21	-2,71	35,60	May 26	-2,92	15. 11. 56,47	June 28	-3,25	38,24	June 12	-3,34	35,04
26	-2,66	35,59	Σ 1935.			Σ 1973.			July 31	-3,26	34,91
Oct. 14	-1,38	35,57	May 22	-2,96	15. 13. 50,66	May 17	-2,93	15. 40. 37,06	Aug. 4	-3,21	34,96
2 Libræ.			B. xv. 358.			22	-2,96	37,21	38 Ophiuchi.		
May 2	-3,27	14. 15. 5,73	May 17	-3,18	15. 19. 5,11	24	-2,96	37,17	Aug. 1	-4,25	17. 8. 1,87
3	-3,27	5,66	Σ 1942.			Σ 1977.			Σ 2147.		
Σ 1850.			May 26	-3,04	15. 19. 10,64	May 26	-3,04	15. 43. 0,36	July 31	-3,01	17. 11. 30,86
Apr. 24	-2,85	14. 21. 43,62	June 20	-3,01	10,87	June 4	-3,07	0,22	Piazzi XVII. 64.		
Piazzi XIV. 126.			Σ 1943.			Piazzi XV. 220.			June 11	-3,18	17. 12. 43,84
May 9	-3,11	14. 27. 30,30	June 4	-3,26	15. 19. 57,78	May 26	-3,30	15. 49. 29,90	Aug. 1	-3,00	43,79
22	-2,98	30,43	Σ 1953.			Σ 2007.			* N.P.D. 31°. 19'.		
30	-2,85	30,53	May 12	-3,14	15. 25. 17,86	May 26	-3,17	15. 58. 49,83	July 31	-2,41	17. 17. 9,37
June 4	-2,75	30,62	17	-3,18	17,71	Σ 2011.			Aug. 4	-2,28	9,32
Σ 1878.			α CORONÆ BOREALIS.			May 27	-3,17	16. 5. 0,16	B.A.C. 5918.		
Apr. 24	-2,83	14. 38. 13,05	May 22	-3,00	15. 28. 7,57	June 20	-3,26	0,23	June 26	-3,12	17. 23. 45,56
May 3	-2,90	13,05	26	-3,02	7,55	δ OPHIUCHI.			Aug. 4	-2,35	45,81
9	-2,92	13,11	June 4	-3,03	7,59	May 26	-3,43	16. 6. 13,73	α OPHIUCHI.		
22	-2,94	13,15	19	-2,98	7,63	June 28	-3,55	13,56	June 9	-3,34	17. 27. 44,48
27	-2,93	12,98	26	-2,93	7,67	ANTARES.			11	-3,36	44,66
June 10	-2,87	13,13	Σ 1884.			May 27	-4,01	16. 19. 54,94			
11	-2,86	13,14	May 2	-3,01	14. 38. 42,22	June 28	-4,20	54,97			
12	-2,85	13,02	Σ 1879.								
18	-2,81	12,96	May 2	-2,90	14. 41. 31,01						
19	-2,80	13,02	Σ 1884.								
July 29	-2,27	13,10	May 22	-2,98	15. 30. 33,14						

Day of Observation.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observation.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observation.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observation.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
<i>α</i> OPHIUCHI continued.			<i>μ</i> ¹ SAGITTARIJ.			<i>ρ</i> ² Sagittarii.			Piazzi XIX. 307.		
June 12	-3,37	17.27.44,45	June 9	-3,97	18.4.29,76	Sept. 13	-3,97	19.12.48,28	July 29	-3,85	19.44.52,38
13	-3,37	44,56	18	-4,10	29,79	19	-3,87	48,12	Aug. 7	-3,86	52,24
18	-3,41	44,50	July 31	-4,29	29,75	23	-3,81	48,22	20	-3,81	52,45
19	-3,42	44,66	Aug. 22	-4,09	29,80	24	-3,79	48,36	Σ 2596.		
26	-3,46	44,57	Groombridge 2614.			* N.P.D. 110°. 56'.			July 28	-3,79	19.46.55,27
28	-3,47	44,51	Aug. 22	-2,70	18.30.40,86	Aug. 27	-4,27	19.13.29,99	29	-3,80	55,37
Aug. 4	-3,34	44,58	26	-2,60	41,16	Sept. 6	-4,15	30,09	Aug. 6	-3,81	55,39
20	-3,13	44,50	27	-2,60	41,29	9	-4,10	30,14	<i>β</i> AQUILÆ.		
58 Ophiuchi.			29	-2,51	41,06	12	-4,06	30,11	Aug. 4	-3,91	19.47.41,82
June 11	-4,05	17.34.8,85	B.A.C. 6428.			<i>χ</i> Aquilæ.			7	-3,91	41,94
12	-4,07	8,86	Aug. 22	-2,88	18.44.10,82	July 28	-3,81	19.35.16,59	20	-3,87	41,97
* N.P.D. 48°. 16'.			27	-2,76	10,70	29	-3,81	16,65	22	-3,86	41,97
June 11	-3,13	17.46.41,75	30	-2,68	10,82	Aug. 5	-3,81	(16,22)	26	-3,83	41,93
B.A.C. 6074.			<i>β</i> LYRÆ.			H. C. 37589.			27	-3,82	41,97
June 18	-4,46	17.49.8,21	June 10	-3,15	18.44.21,57	Aug. 15	-3,69	19.38.26,81	29	-3,81	42,10
July 31	-4,56	8,35	11	-3,17	21,37	<i>γ</i> AQUILÆ.			Sept. 4	-3,74	42,09
4 Sagittarii.			12	-3,18	21,47	July 29	-3,83	19.38.53,45	6	-3,72	42,04
Aug. 5	-4,31	17.50.19,99	13	-3,20	21,38	Aug. 6	-3,83	53,51	17	-3,57	42,05
15	-4,20	20,05	14	-3,21	21,49	27	-3,72	53,44	23	-3,48	41,99
<i>τ</i> Ophiuchi.			18	-3,27	21,59	Sept. 14	-3,50	53,56	26	-3,43	42,03
June 18	-3,79	17.54.38,78	July 29	-3,42	21,56	19	-3,42	53,51	Oct. 13	-3,14	41,82
July 31	-3,91	38,61	31	-3,41	21,46	23	-3,36	53,49	16 Vulpeculæ.		
Aug. 1	-3,91	38,68	Aug. 6	-3,36	21,49	Σ 2577.			July 28	-3,73	19.55.27,01
70 Ophiuchi.			7	-3,35	21,49	Aug. 7	-3,73	19.39.33,75	29	-3,74	26,72
June 18	-3,59	17.57.37,33	20	-3,18	21,40	22	-3,64	33,56	Aug. 1	-3,74	26,95
July 31	-3,69	37,20	26	-3,09	21,42	26	-3,13	33,55	Σ 2620.		
Aug. 1	-3,69	37,26	Sept. 8	-2,84	21,46	Oct. 13	-2,80	33,60	Aug. 22	-3,82	19.56.49,52
Σ ₂ 341.			<i>ζ</i> AQUILÆ.			14	-2,78	33,78	B.A.C. 6896.		
Aug. 4	-3,33	17.59.6,53	June 10	-3,26	18.58.17,13	<i>α</i> AQUILÆ.			Aug. 7	-3,81	19.56.57,29
* N.P.D. 68°. 34'.			13	-3,31	17,37	Aug. 4	-3,89	19.43.13,33	Sept. 12	-3,53	57,33
Aug. 1	-3,36	17.59.15,00	July 31	-3,70	17,24	6	-3,89	13,20	25	-3,33	57,44
5	-3,32	15,16	Aug. 7	-3,67	17,21	22	-3,83	13,12	Oct. 14	-2,98	57,22
72 Ophiuchi.			27	-3,48	17,19	27	-3,79	13,28	Σ 2621.		
Aug. 8	-3,50	18.0.0,26	Sept. 14	-3,21	17,22	29	-3,77	13,18	Aug. 15	-3,88	19.57.6,44
15	-3,43	0,24	19	-3,12	17,17	Aug. 4	-3,70	13,16	20	-3,86	6,30
Sept. 17	-2,90	0,32	23	-3,05	17,19	6	-3,68	13,15	27	-3,82	6,56
19	-2,87	0,37	B.A.C. 6590.			8	-3,66	13,19	Σ 2622.		
Σ 2500.			Aug. 27	-4,13	19.10.9,78	9	-3,65	13,33	Sept. 9	-3,57	19.57.6,33
Aug. 22	-3,53	19.12.39,59	Sept. 6	-4,00	9,97	12	-3,60	13,23	19	-3,43	6,70
29	-3,44	39,51	8	-3,96	9,97	17	-3,53	13,18	Oct. 13	-3,00	6,59
Sept. 8	-3,29	39,63	9	-3,96	9,85	19	-3,50	13,32	15 Sagittæ.		
<i>ρ</i> ¹ Sagittarii.			Σ 2577.			23	-3,44	13,16	Sept. 6	-3,61	19.57.8,41
Aug. 7	-4,33	19.12.41,03	Aug. 7	-3,73	19.39.33,75	26	-3,39	13,23	17	-3,46	8,41
15	-4,29	41,04	22	-3,64	33,56	<i>ο</i> Aquilæ.			23	-3,36	8,41
<i>ο</i> Aquilæ.			Sept. 26	-3,13	33,55	July 29	-3,85	19.43.36,11	27	-3,29	8,32
Aug. 15	-3,83	36,31	Oct. 13	-2,80	33,60	Aug. 15	-3,83	36,31			

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	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
<i>θ</i> Sagittæ. p.			61 Cygni.			<i>α</i> AQUARIII continued.			* N.P.D. 61°. 54'.		
July 28	-3,77	20. 3. 2,51	July 30	-4,10	20. 59. 57,09	Sept. 8	-4,17	21. 57. 49,32	Dec. 1	-3,37	22. 33. 1,18
30	-3,78	2,63	Aug. 6	-4,15	57,17	9	-4,17	49,22	3	-3,33	1,04
Σ 2655.			7	-4,16	57,18	26	-4,08	49,30	5	-3,30	1,06
Aug. 4	-3,80	20. 7. 18,46	Σ 2767.			Oct. 14	-3,90	49,14	10	-3,23	1,02
6	-3,80	18,42	Aug. 26	-3,96	21. 3. 24,68	Nov. 14	-3,48	49,06	B. XXII. 741.		
7	-3,80	18,64	29	-3,95	24,89	Dec. 1	-3,26	49,33	Sept. 3	-4,18	22. 34. 27,75
<i>α</i> CAPRICORNI.			Sept. 6	-3,91	24,91	3	-3,24	49,16	17	-4,20	27,76
July 29	-4,21	20. 9. 26,99	Σ, 430.			5	-3,21	49,30	24	-4,17	27,70
Sept. 14	-4,04	26,94	Aug. 29	-3,94	21. 5. 0,29	10	-3,16	49,32	<i>ο</i> Pegasi.		
27	-3,86	27,09	Sept. 4	-3,91	0,58	13	-3,12	49,09	Dec. 4	-3,32	22. 34. (29,59)
Σ 2662.			9	-3,87	0,41	Σ 2868.			6	-3,30	29,21
Aug. 4	-3,90	20. 11. 9,85	<i>δ</i> Equulei.			Aug. 26	-4,13	22. 2. 5,83	12	-3,21	29,33
6	-3,90	9,86	July 30	-3,91	21. 6. 55,80	Sept. 6	-4,14	5,82	13	-3,20	29,20
7	-3,90	9,91	Aug. 22	-4,02	55,86	8	-4,13	5,91	Σ 2936.		
Σ 2676.			26	-4,02	55,87	Σ 2869.			Sept. 26	-4,17	22. 35. 2,76
July 29	-3,78	20. 16. 20,66	Σ 2786.			Sept. 9	-4,13	50,48	Oct. 11	-4,07	2,87
30	-3,78	20,67	July 30	-3,90	21. 12. 4,63	18	-4,09	50,62	13	-4,06	2,97
Aug. 4	-3,79	20,73	Aug. 20	-4,04	4,87	H. C. 43487.			* N.P.D. 62°. 5'.		
Piazzi XX. 177.			26	-4,04	4,72	Dec. 3	-3,08	22. 9. 12,99	Dec. 1	-3,40	22. 35. 52,73
July 29	-3,88	20. 23. 47,99	<i>β</i> AQUARIII.			5	-3,05	12,94	3	-3,36	52,02
30	-3,89	47,86	Aug. 6	-4,09	21. 23. 23,72	6	-3,03	13,15	5	-3,33	51,84
Aug. 4	-3,91	47,95	20	-4,18	23,87	10	-2,97	13,11	10	-3,26	52,49
Σ 2698.			22	-4,18	23,84	H. C. 43516.			B. XXII. 772.		
July 30	-3,80	20. 27. 15,64	26	-4,19	23,83	Dec. 1	-3,12	22. 9. 45,15	Dec. 22	-3,22	22. 35. 56,64
Aug. 4	-3,82	15,86	29	-4,19	23,70	Σ 2904.			24	-3,20	56,95
8	-3,83	15,64	Sept. 9	-4,15	23,73	Sept. 6	-4,20	22. 19. 10,42	* N.P.D. 62°. 23'.		
20	-3,81	15,79	22	-4,06	23,76	8	-4,20	11,02	Dec. 1	-3,46	22. 41. 22,75
Σ 2701.			24	-4,04	23,71	17	-4,19	10,51	3	-3,42	23,47
July 30	-3,88	20. 29. 35,89	27	-4,01	23,72	<i>ζ</i> Aquarii.			5	-3,39	23,04
Aug. 4	-3,91	35,78	30	-3,98	23,74	Sept. 22	-4,16	22. 20. 50,94	6	-3,38	23,14
6	-3,92	36,16	Dec. 1	-3,13	23,66	23	-4,15	50,89	* N.P.D. 63°. 12'.		
2 Equulei.			Σ 2847.			24	-4,15	50,81	Dec. 1	-3,54	22. 49. 29,59
July 30	-3,94	20. 54. 33,82	Aug. 20	-4,15	21. 50. 4,08	Σ, 471.			3	-3,51	29,09
Aug. 6	-3,98	33,84	29	-4,18	4,13	Sept. 3	-4,17	22. 21. 29,21	5	-3,48	29,48
7	-3,98	34,17	Sept. 3	-4,19	4,24	6	-4,17	29,32	6	-3,46	29,25
Σ 2749.			Σ 2849.			8	-4,18	29,55	* N.P.D. 63°. 34'.		
July 30	-3,96	20. 56. 56,78	Sept. 4	-4,10	21. 50. 25,19	Piazzi XXII. 169.			Dec. 5	-3,52	22. 53. 17,68
Aug. 6	-4,02	56,91	8	-4,09	25,05	Dec. 10	-3,32	22. 30. 58,75	<i>α</i> PEGASI.		
7	-4,02	56,98	9	-4,09	25,30	13	-3,28	58,72	Jan. 20	-0,25	22. 57. (3,00)
<i>α</i> AQUARIII.			<i>α</i> AQUARIII.			24	-3,17	58,87	Sept. 12	-4,25	2,78
Aug. 26	-4,15	21. 57. 49,34	Aug. 26	-4,15	21. 57. 49,34						
Sept. 4	-4,17	49,25	Sept. 4	-4,17	49,25						
6	-4,17	49,29	6	-4,17	49,29						

Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean R.A.	Mean R.A. Jan. 1, 1845.
	s.	h. m. s.		s.	h. m. s.		s.	h. m. s.		s.	h. m. s.
α PEGASI continued.			A Piscium.			H. C. 45649 continued.			B.A.C. 8154.		
Sept. 17	- 4,26	22.57. 2,64	Dec. 23	- 3,36	23. 0.44,55	Dec. 5	- 3,69	23.11. 7,55	Sept. 12	- 4,22	23.15. 43,55
22	- 4,26	2,65	24	- 3,34	44,61	6	- 3,58	7,63	19	- 4,25	43,46
Oct. 3	- 4,23	2,77	* N.P.D. 66°. 8'.			* N.P.D. 66°. 47'.			23	- 4,25	43,31
7	- 4,21	2,47							Σ 3045.		
10	- 4,18	2,50	Dec. 1 - 3,72 23. 8.19,99 3 - 3,69 20,07 5 - 3,66 20,00 6 - 3,65 19,96			Dec. 1 - 3,80 23.14. 0,19 6 - 3,70 0,24					
11	- 4,18	2,56									
13	- 4,16	2,60									
Nov. 1	- 3,98	2,58										H. C. 45649.			* N.P.D. 66°. 45'.			Σ 3055.
Dec. 3	- 3,57	2,59	Dec. 1 - 3,75 23.11. 7,67 3 - 3,72 7,60			Nov. 28 - 3,82 23.14. 50,00 Dec. 3 - 3,75 49,99 5 - 3,72 49,75 10 - 3,65 49,62					
5	- 3,55	2,60							B. XXII. 1228.			Oct. 24 - 4,24 23.46. 29,38
10	- 3,48	2,61	Dec. 23 - 3,34 22.57. 32,06								
13	- 3,44	2,73									
15	- 3,42	2,57									
24	- 3,31	2,54									

CATALOGUE OF THE CONCLUDED MEAN RIGHT ASCENSIONS, JAN. 1, 1845;
WITH THE ANNUAL VARIATIONS.

Name of Star.	Approximate N.P.D. Jan. 1, 1845.	Number of Obser- vations.	Mean R.A. Jan. 1, 1845.	Annual Variation.	Name of Star.	Approximate N.P.D. Jan. 1, 1845.	Number of Obser- vations.	Mean R.A. Jan. 1, 1845.	Annual Variation.
			<i>h. m. s.</i>	<i>s.</i>				<i>h. m. s.</i>	<i>s.</i>
α ANDROMEDÆ.....	61.46	18	0. 0. 23.22	+ 3,072	B. v. 1015.....	82. 6	2	5. 39. 30.40	+ 3,255
Σ 8. <i>sf.</i>	93.56	3	0. 3. 38.13	+ 3,069	α ORIONIS.....	82.38	20	5. 46. 46.86	+ 3,243
β CETI.....	108.50	18	0. 35. 48.43	+ 3,000	B. v. 1359.....	80.56	2	5. 52. 48.51	+ 3,284
ϕ^3 Ceti.....	102. 6	3	0. 48. 15.15	+ 3,011	1 Geminorum.....	66.44	2	5. 54. 41.91	+ 3,645
* (Mag. 8, 9).....	103. 5	4	0. 49. 50.26	+ 3,003	H. C. 11457.....	80.51	1	5. 54. 48.84	+ 3,286
ϕ^4 Ceti.....	102.13	3	0. 50. 58.21	+ 3,007	42 Aurigæ.....	43.32	1	6. 6. 1.61	+ 4,477
B. o. 962.....	101.30	3	0. 54. 31.26	+ 3,006	H. C. 12053.....	68.51	1	6. 11. 15.95	+ 3,587
* (Mag. 9).....	99.29	1	0. 58. 10.28	+ 3,014	B.A.C. 2038.....	68.48	2	6. 11. 58.16	+ 3,588
28 Ceti.....	100.40	4	0. 58. 18.56	+ 3,007	15 Geminorum.....	69. 7	3	6. 18. 32.35	+ 3,579
ϵ Piscium.....	85.10	2	1. 0. 23.33	+ 3,099	γ Geminorum.....	73.28	2	6. 28. 45.37	+ 3,464
η Ceti.....	101. 0	3	1. 0. 47.59	+ 3,002	55 Aurigæ.....	45.20	1	6. 31. 47.90	+ 4,380
32 Ceti.....	99.44	3	1. 2. 25.50	+ 3,009	Σ 953. <i>sf.</i>	80.53	2	6. 32. 40.97	+ 3,283
POLARIS. <i>nf.</i>	1.31	37	1. 3. 34.62	+17,027	56 Aurigæ.....	46.17	1	6. 35. 33.78	+ 4,335
B. i. 51.....	98.45	2	1. 3. 54.03	+ 3,014	SIRIUS.....	106.30	18	6. 38. 19.29	+ 2,646
36 Ceti.....	97.36	5	1. 4. 59.56	+ 3,021	H. C. 13381.....	47.29	1	6. 48. 19.88	+ 4,269
37 Ceti.....	98.45	4	1. 6. 35.62	+ 3,012	H. C. 13540.....	65.26	1	6. 52. 31.53	+ 3,666
B. i. 186.....	96. 9	4	1. 11. 46.94	+ 3,026	Σ 1033.....	37.12	1	7. 2. 32.37	+ 4,767
B. i. 223.....	94.15	5	1. 13. 50.22	+ 3,039	Σ 1037.....	62.31	1	7. 3. 10.30	+ 3,740
B. i. 228.....	95.23	5	1. 14. 17.01	+ 3,030	δ Geminorum. <i>nf.</i> ...	67.44	1	7. 10. 51.70	+ 3,593
B. i. 237.....	94.37	6	1. 14. 42.13	+ 3,036	CASTOR. <i>nf.</i> †.....	57.47	18	7. 24. 42.14	+ 3,856
H. C. 2553.....	93.17	8	1. 16. 27.64	+ 3,045	ν Geminorum.....	62.46	2	7. 26. 21.97	+ 3,712
B. i. 276.....	91.47	4	1. 16. 46.54	+ 3,057	PROCYON.....	84.23	22	7. 31. 11.11	+ 3,145
* (Mag. 9, 10).....	33.36	3	1. 22. 54.01	+ 3,783	POLLUX.....	61.36	22	7. 35. 49.40	+ 3,683
B. i. 497.....	87. 0	5	1. 28. 25.37	+ 3,097	6 Cancri.....	61.47	3	7. 53. 59.33	+ 3,702
B. i. 568.....	85.52	5	1. 32. 4.44	+ 3,108	μ^1 Cancri.....	66.56	3	7. 57. 7.00	+ 3,569
B. i. 576.....	83.42	5	1. 32. 17.20	+ 3,128	ρ Argus.....	113.52	1	8. 0. 56.56	+ 2,560
B.A.C. 549.....	73.45	2	1. 39. 57.69	+ 3,234	Σ 1200.....	39.46	2	8. 4. 34.28	+ 4,446
B. i. 736.....	83. 5	6	1. 40. 32.41	+ 3,139	B. VIII. 228.....	85.18	1	8. 9. 8.56	+ 3,163
B.A.C. 609.....	78.28	5	1. 51. 8.52	+ 3,197	B. VIII. 241.....	88.23	1	8. 9. 34.87	+ 3,103
B. i. 988.....	79. 6	4	1. 55. 0.20	+ 3,194	H. C. 16341.....	86.51	1	8. 12. 35.94	+ 3,132
B.A.C. 632.....	72.30	1	1. 55. 13.09	+ 3,273	Piazzi VIII. 49.....	87.21	1	8. 14. 7.96	+ 3,122
* (Mag. 9, 10).....	78.50	2	1. 57. 24.74	+ 3,200	21 Cancri.....	78.52	1	8. 15. 26.14	+ 3,290
α ARIETIS.....	67.16	24	1. 58. 26.90	+ 3,347	B. VIII. 466.....	87.24	1	8. 17. 32.52	+ 3,121
H. C. 4925.....	73.57	1	2. 31. 34.23	+ 3,307	Piazzi VIII. 70.....	81.51	2	8. 18. 24.26	+ 3,228
α CETI.....	86.31	14	2. 54. 10.97	+ 3,127	η Cancri.....	60. 2	2	8. 23. 44.55	+ 3,487
* (Mag. 9).....	110.50	1	2. 56. 19.79	+ 2,717	B. VIII. 626.....	76.14	1	8. 23. 47.93	+ 3,336
ζ Arietis.....	69.32	1	3. 6. 0.23	+ 3,431	B. VIII. 644.....	78.13	1	8. 24. 35.77	+ 3,296
α Persei.....	40.42	2	3. 13. 17.17	+ 4,232	B.A.C. 2872.....	76.13	1	8. 25. 9.66	+ 3,335
η Tauri.....	66.23	1	3. 38. 16.99	+ 3,546	* (Mag. 9).....	76.32	1	8. 29. 48.62	+ 3,325
ω^2 Tauri.....	69.48	1	4. 8. 11.29	+ 3,504	Piazzi VIII. 131. <i>np.</i>	40.35	1	8. 32. 25.00	+ 4,299
ALDEBARAN.....	73.48	14	4. 27. 1.97	+ 3,427	Piazzi VIII. 131. <i>sf.</i>	40.35	1	8. 32. 25.62	+ 4,299
ϵ Aurigæ.....	57. 5	1	4. 46. 54.35	+ 3,891	H. C. 17139.....	73. 0	1	8. 34. 9.84	+ 3,390
ρ Orionis. <i>sp.</i>	87.20	1	5. 5. 11.59	+ 3,131	ϵ HYDRÆ.....	83. 1	8	8. 38. 33.92	+ 3,197
RIGEL. <i>nf.</i>	98.23	16	5. 7. 5.46	+ 2,879	H. C. 17526.....	45.44	2	8. 45. 43.90	+ 4,048
B. v. 303.....	86. 9	1	5. 13. 9.26	+ 3,159	ρ^2 Cancri.....	61.29	2	8. 46. 22.16	+ 3,616
B. v. 324.....	84.46	3	5. 13. 55.54	+ 3,191	ι Ursæ Majoris.....	41.21	1	8. 48. 34.08	+ 4,201
B.A.C. 1661.....	86.35	1	5. 13. 57.12	+ 3,149	α^2 Cancri.....	73.50	2	8. 48. 55.63	+ 3,359
m Orionis. <i>sp.</i>	86.37	3	5. 14. 41.39	+ 3,148	Σ 1332. <i>sp.</i>	65.42	3	9. 8. 21.95	+ 3,482
m Orionis. <i>nf.</i>	86.37	1	5. 14. 42.38	+ 3,148	Σ 3121.....	60.46	1	9. 8. 40.54	+ 3,579
β TAURI.....	61.32	16	5. 16. 29.92	+ 3,783	B. ix. 298.....	92. 8	1	9. 13. 54.24	+ 3,037
B. v. 399.....	85.57	5	5. 17. 3.46	+ 3,164	Σ 201.....	61.26	3	9. 14. 46.69	+ 3,551
δ Orionis.....	90.25	2	5. 24. 5.55	+ 3,061	Σ 1348.....	82.59	2	9. 16. 18.58	+ 3,178
B. v. 623.....	83.56	2	5. 24. 57.27	+ 3,211	A Hydræ.....	94.27	1	9. 17. 38.87	+ 3,004
α Leporis.....	107.56	2	5. 25. 53.88	+ 2,643	α HYDRÆ.....	97.59	13	9. 19. 58.29	+ 2,950
* (Mag. 8, 9).....	83.33	3	5. 26. 26.20	+ 3,220	ω Leonis.....	80.16	3	9. 20. 8.99	+ 3,218
* (Mag. 8, 9).....	83.21	1	5. 27. 3.60	+ 3,225	λ Leonis.....	66.21	2	9. 22. 52.27	+ 3,442
* (Mag. 9, 10)*.....	83.16	2	5. 28. 8.72	+ 3,227	B. ix. 627.....	84.48	1	9. 27. 57.68	+ 3,146
ζ Tauri.....	68.57	1	5. 28. 23.20	+ 3,580	2 Sextantis.....	84.39	1	9. 30. 22.12	+ 3,146
B. v. 802.....	82.46	1	5. 31. 21.52	+ 3,239	Σ 205.....	48.19	3	9. 32. 47.19	+ 3,784
* (Mag. 9).....	82.26	2	5. 34. 34.72	+ 3,247	ϕ Ursæ Majoris.....	35.13	3	9. 41. 31.01	+ 4,152
B. v. 925.....	82.39	3	5. 35. 39.51	+ 3,242	B. ix. 929.....	75.10	1	9. 42. 25.25	+ 3,271

* The N.P.D. of this star is uncertain.

† The preceding star having been observed, + 0°.34 has been added.

Name of Star.	Approximate N.P.D. Jan. 1, 1845.	Number of Obser- vations.	Mean R.A. Jan. 1, 1845.	Annual Variation.	Name of Star.	Approximate N.P.D. Jan. 1, 1845.	Number of Obser- vations.	Mean R.A. Jan. 1, 1845.	Annual Variation.
	° ' "		h. m. s.	s.		° ' "		h. m. s.	s.
23 Leonis	76. 13	2	9. 42. 33.36	+ 3,257	Σ 1690. <i>np.</i>	94. 1	1	12. 48. 15.68	+ 3,090
H. C. 19371.	74. 32	4	9. 45. 21.93	+ 3,276	Σ 1699.	61. 41	3	12. 51. 12.06	+ 2,911
Σ 1397. <i>np.</i>	64. 13	3	9. 47. 56.53	+ 3,423	<i>k</i> Virginis. <i>sp.</i>	92. 58	3	12. 51. 40.67	+ 3,085
Σ ₂ 210.	42. 54	3	9. 52. 47.34	+ 3,829	Σ 1719. <i>sp.</i>	88. 35	1	12. 59. 25.31	+ 3,062
Σ 1404. <i>np.</i>	90. 57	3	9. 56. 22.97	+ 3,059	<i>g</i> Virginis.	99. 55	2	12. 59. 46.91	+ 3,130
REGULUS.	77. 17	18	10. 0. 6.71	+ 3,221	Σ ₂ 260.	62. 14	3	13. 0. 36.74	+ 2,886
Σ ₂ 213	61. 49	4	10. 4. 22.08	+ 3,417	53 Virginis.	105. 22	1	13. 3. 49.05	+ 3,171
B.A.C. 3506.	71. 29	3	10. 7. 49.03	+ 3,282	Σ 1733. <i>np.</i>	71. 55	1	13. 8. 44.27	+ 2,942
γ Leonis. <i>np.</i>	69. 23	3	10. 11. 25.18	+ 3,301	H. C. 24639.	71. 53	2	13. 8. 53.91	+ 2,941
B.A.C. 3529. <i>sp.</i> * ..	82. 47	3	10. 12. 25.40	+ 3,148	* (Mag. 8).	30. 59	2	13. 10. 0.96	+ 2,401
Σ ₂ 217.	70. 59	3	10. 18. 30.05	+ 3,268	H. C. 24744.	71. 25	1	13. 12. 41.64	+ 2,930
Σ ₂ 218.	85. 39	3	10. 19. 29.47	+ 3,114	Σ 1734.	86. 15	1	13. 12. 50.04	+ 3,043
Σ 1439.	68. 24	1	10. 21. 37.11	+ 3,291	Σ 1737. <i>nf.</i>	71. 25	3	13. 14. 15.22	+ 2,927
Σ 1445. <i>np.</i>	90. 4	3	10. 24. 47.82	+ 3,070	SPICA.	100. 21	15	13. 17. 2.09	+ 3,151
48 Leonis	82. 15	2	10. 26. 42.78	+ 3,143	Σ ₂ 266	73. 29	3	13. 20. 52.70	+ 2,934
Σ 1457. <i>sf.</i>	83. 28	1	10. 30. 38.87	+ 3,129	B.A.C. 4530. <i>sp.</i>	89. 31	3	13. 26. 22.31	+ 3,066
B.A.C. 3649.	80. 21	3	10. 31. 34.86	+ 3,157	ζ Virginis.	89. 48	2	13. 26. 47.83	+ 3,068
Σ 1465. <i>sp.</i>	44. 34	3	10. 34. 4.79	+ 3,568	Σ 1776.	43. 0	1	13. 35. 22.88	+ 2,491
Σ 1470.	94. 57	3	10. 38. 23.02	+ 3,030	Σ 1781.	84. 6	3	13. 38. 20.21	+ 3,013
Σ ₂ 228.	66. 37	3	10. 38. 52.04	+ 3,271	Σ ₂ 273	83. 57	3	13. 48. 33.24	+ 3,006
Piazzi X. 179. <i>sf.</i> ...	81. 43	3	10. 44. 5.45	+ 3,134	Σ 1805.	85. 15	3	14. 2. 9.30	+ 3,014
Σ 1496. <i>sf.</i>	75. 54	3	10. 50. 8.47	+ 3,188	Σ 1823. <i>np.</i>	78. 58	1	14. 8. 13.93	+ 2,932
B. x. 916.	92. 39	1	10. 50. 19.29	+ 3,052	ARCTURUS.	70. 0	15	14. 8. 35.61	+ 2,734
Σ 1500.	92. 39	2	10. 52. 8.21	+ 3,053	2 Libræ.	101. 0	2	14. 15. 5.70	+ 3,215
Σ 1506. <i>nf.</i>	93. 23	3	10. 56. 50.69	+ 3,049	Σ 1850. <i>nf.</i>	61. 1	1	14. 21. 43.62	+ 2,641
B. x. 1053.	82. 2	1	10. 58. 7.07	+ 3,120	Piazzi XIV. 126.	29. 5	4	14. 27. 30.45	+ 1,628
Σ ₂ 231. <i>nf.</i>	58. 42	3	11. 2. 33.22	+ 3,272	Σ 1878. <i>sf.</i>	28. 5	2	14. 38. 11.68	+ 1,474
B.A.C. 3831.	69. 1	3	11. 5. 31.97	+ 3,193	ε Bootis. <i>sf.</i>	62. 16	11	14. 38. 13.06	+ 2,623
p ^b Leonis	89. 14	2	11. 5. 49.58	+ 3,075	Σ 1879. <i>sp.</i>	79. 41	1	14. 38. 42.22	+ 2,915
δ LEONIS.	68. 38	5	11. 5. 51.47	+ 3,193	Σ 1884. <i>sp.</i>	64. 59	1	14. 41. 31.01	+ 2,666
Piazzi XI. 14.	51. 35	1	11. 6. 32.34	+ 3,316	α ² LIBRÆ.	105. 24	1	14. 42. 18.59	+ 3,310
Σ 1521. <i>np.</i>	61. 35	1	11. 7. 1.71	+ 3,236	* (Mag. 9).	27. 47	3	14. 44. 0.27	+ 1,406
n Leonis.	75. 51	2	11. 7. 45.16	+ 3,147	Σ 1921. <i>sf.</i>	50. 45	1	15. 6. 3.65	+ 2,278
75 Leonis.	87. 8	2	11. 9. 18.76	+ 3,086	Σ 1931. <i>np.</i>	79. 0	2	15. 11. 16.11	+ 2,878
Piazzi XI. 27.	46. 50	4	11. 9. 53.33	+ 3,343	Σ 1934. <i>sp.</i>	45. 38	1	15. 11. 56.47	+ 2,099
ξ Ursæ Majoris. <i>np.</i>	57. 36	3	11. 9. 53.84	+ 3,256	Σ 1935. <i>np.</i>	58. 44	1	15. 13. 50.66	+ 2,463
Σ 1534. <i>sf.</i>	70. 57	3	11. 13. 41.90	+ 3,163	B. xv. 358.	84. 13	1	15. 19. 5.11	+ 2,967
Σ 1535. <i>sp.</i>	88. 14	2	11. 14. 57.32	+ 3,079	Σ 1942. <i>np.</i>	68. 0	2	15. 19. 10.76	+ 2,658
i Leonis <i>sp.</i>	78. 37	3	11. 15. 50.40	+ 3,123	Σ 1943. <i>np.</i>	84. 5	1	15. 19. 57.78	+ 2,964
e Leonis	92. 9	3	11. 22. 23.73	+ 3,062	Σ 1953. <i>nf.</i>	83. 58	2	15. 25. 17.79	+ 2,960
Σ ₂ 234.	47. 51	3	11. 22. 25.52	+ 3,268	α CORONÆ BOREALIS	62. 46	5	15. 28. 7.60	+ 2,528
H. C. 21896.	64. 50	3	11. 23. 42.41	+ 3,170	H. C. 28506.	59. 30	1	15. 30. 33.14	+ 2,444
Σ 1558†.	67. 40	3	11. 28. 35.60	+ 3,146	42 Libræ.	113. 19	2	15. 31. 7.64	+ 3,528
B. xi. 687.	83. 16	3	11. 38. 50.26	+ 3,085	η Libræ.	105. 10	2	15. 35. 21.79	+ 3,363
B. xi. 701.	83. 15	1	11. 39. 39.48	+ 3,085	γ Coronæ Borealis. .	63. 13	3	15. 36. 14.32	+ 2,524
β LEONIS.	74. 34	11	11. 41. 9.00	+ 3,065	α SERPENTIS.	83. 5	3	15. 36. 38.29	+ 2,939
Σ 1576. <i>nf.</i>	58. 19	3	11. 44. 50.70	+ 3,125	Σ 1973. <i>sf.</i>	53. 4	3	15. 40. 37.15	+ 2,246
Piazzi XI. 181.	40. 12	3	11. 46. 35.89	+ 3,163	Σ 1977. <i>sf.</i>	64. 4	2	15. 43. 0.29	+ 2,533
Σ 1582. <i>sp.</i>	67. 9	1	11. 48. 2.40	+ 3,100	Piazzi XV. 220. <i>sf.</i>	86. 9	1	15. 49. 29.90	+ 2,995
* (Mag. 9).	39. 33	2	11. 52. 27.54	+ 3,124	Σ 2007. <i>sf.</i>	76. 15	1	15. 58. 49.83	+ 2,788
Σ 3078. <i>sf.</i>	77. 51	3	12. 1. 22.16	+ 3,069	Σ 2011. <i>sp.</i>	60. 35	1	16. 1. 23.47	+ 2,415
Σ 3074. <i>np.</i>	100. 59	3	12. 1. 27.94	+ 3,072	Σ 2017. <i>nf.</i>	75. 3	2	16. 5. 0.20	+ 2,757
Σ 1606. <i>sf.</i>	49. 15	1	12. 2. 56.83	+ 3,056	δ OPHIUCHI.	93. 17	2	16. 6. 13.65	+ 3,138
Σ 1619. <i>sf.</i>	96. 24	3	12. 7. 11.75	+ 3,075	ANTARES.	116. 5	2	16. 19. 54.96	+ 3,664
Σ 1634. <i>np.</i>	66. 13	1	12. 12. 53.24	+ 3,037	η Draconis.	28. 8	1	16. 21. 54.16	+ 0,795
H. C. 23136.	64. 7	3	12. 13. 16.98	+ 3,033	Σ 2052. <i>np.</i>	71. 15	1	16. 22. 3.66	+ 2,658
H. C. 23132.	64. 8	1	12. 13. 38.01	+ 3,032	* (Mag. 8).	30. 14	1	16. 46. 32.25	+ 0,893
B.A.C. 4218. <i>nf.</i>	79. 25	5	12. 22. 41.29	+ 3,047	Σ 2120. <i>sf.</i>	61. 41	2	16. 58. 37.00	+ 2,376
β CORVI.	112. 32	10	12. 26. 15.41	+ 3,134	η Ophiuchi.	105. 32	1	17. 1. 29.51	+ 3,429
Σ 1658. <i>sf.</i>	81. 42	2	12. 27. 14.04	+ 3,047	α HERCULIS. <i>np.</i> ..	75. 26	3	17. 7. 34.97	+ 2,732
B. xii. 464.	101. 10	2	12. 27. 30.90	+ 3,102	38 Ophiuchi.	116. 27	1	17. 8. 1.87	+ 3,718
B. xii. 473.	101. 13	1	12. 27. 50.73	+ 3,103	Σ 2147. <i>np.</i>	60. 55	1	17. 11. 30.86	+ 2,343
γ Virginis. <i>sp.</i>	90. 36	2	12. 33. 48.61	+ 3,073	Piazzi XVII. 64.	61. 1	2	17. 12. 43.82	+ 2,345
Σ 1678. <i>nf.</i>	74. 47	3	12. 37. 40.25	+ 3,011	* (Mag. 7. 8.).	31. 19	2	17. 17. 9.35	+ 0,911
35 Comæ†.	67. 55	3	12. 45. 39.63	+ 2,964	B.A.C. 5918.	31. 13	2	17. 23. 45.68	+ 0,891
B.A.C. 4336.	81. 16	1	12. 47. 20.21	+ 3,028	α OPHIUCHI.	77. 19	10	17. 27. 44.55	+ 2,773
* (Mag. 9, 10.).	81. 19	1	12. 47. 25.11	+ 3,029	58 Ophiuchi.	111. 36	2	17. 34. 8.86	+ 3,597

* The close double-star of Σ 1426.

† The close double-star.

‡ The *sp.* of the close double-star.

Name of Star.	Approximate N.P.D. Jan. 1, 1845.	Number of Obser- vations.	Mean R.A. Jan. 1, 1845.	Annual Variation.	Name of Star.	Approximate N.P.D. Jan. 1, 1845.	Number of Obser- vations.	Mean R.A. Jan. 1, 1845.	Annual Variation.
	° ' "		h. m. s.	s.		° ' "		h. m. s.	s.
* (Mag. 9.).....	48. 16	1	17. 46. 41.75	+ 1,880	Σ 2701.....	78. 29	3	20. 29. 35.94	+ 2,854
B.A.C. 6074.....	120. 14	2	17. 49. 8.28	+ 3,849	2 Equulei. <i>sp.</i>	83. 26	3	20. 54. 33.94	+ 2,960
4 Sagittarii.....	113. 48	2	17. 50. 20.02	+ 3,660	Σ 2749. <i>np.</i>	87. 5	3	20. 56. 56.89	+ 3,022
τ Ophiuchi.....	98. 10	3	17. 54. 38.69	+ 3,263	61 Cygni. <i>np.</i>	52. 0	3	20. 59. 57.15	+ 2,332
70 Ophiuchi. <i>np.</i> ...	87. 28	3	17. 57. 37.26	+ 3,011	Σ 2767.....	70. 40	3	21. 3. 24.83	+ 2,744
Σ ₂ 341.....	68. 34	1	17. 59. 6.53	+ 2,546	Σ ₂ 430. <i>nf.</i>	66. 28	3	21. 5. 0.43	+ 2,668
* (Mag. 7).....	68. 34	2	17. 59. 15.08	+ 2,546	δ Equulei. <i>sp.</i>	80. 37	3	21. 6. 55.84	+ 2,919
72 Ophiuchi.....	80. 27	4	18. 0. 0.30	+ 2,846	Σ 2786. <i>n. or s.</i>	81. 7	3	21. 12. 4.74	+ 2,931
μ ¹ SAGITTARI.....	111. 6	4	18. 4. 29.78	+ 3,586	β AQUARI.....	96. 15	11	21. 23. 23.75	+ 3,163
Groombridge 2614.....	39. 1	4	18. 30. 41.09	+ 1,435	Σ 2847.....	94. 14	3	21. 50. 4.15	+ 3,124
B.A.C. 6428.....	41. 24	3	18. 44. 10.78	+ 1,583	Σ 2849. <i>sf.</i>	70. 30	3	21. 50. 25.18	+ 2,817
β LYRÆ.....	56. 49	13	18. 44. 21.47	+ 2,212	α AQUARI.....	91. 4	13	21. 57. 49.24	+ 3,083
ζ AQUILÆ.....	76. 22	8	18. 58. 17.21	+ 2,757	Σ 2868.....	68. 13	3	22. 2. 5.85	+ 2,808
B.A.C. 6590.....	105. 48	4	19. 10. 9.89	+ 3,432	Σ 2869. <i>nf.</i>	76. 8	3	22. 2. 50.56	+ 2,909
Σ 2500. <i>sp.</i>	70. 34	3	19. 12. 39.58	+ 2,622	H. C. 43487.....	60. 43	4	22. 9. 13.05	+ 2,722
ρ ¹ Sagittarii.....	108. 8	2	19. 12. 41.04	+ 3,487	H. C. 43516.....	61. 8	1	22. 9. 45.15	+ 2,729
ρ ² Sagittarii.....	108. 35	4	19. 12. 48.25	+ 3,498	Σ 2904. <i>sf.</i>	92. 35	3	22. 19. 10.65	+ 3,096
* (Mag. 8.).....	110. 56	4	19. 13. 30.08	+ 3,556	ζ Aquarii. <i>np.</i>	90. 49	3	22. 20. 50.88	+ 3,079
χ Aquilæ.....	78. 32	2	19. 35. 16.62	+ 2,822	Σ ₂ 471.....	83. 10	3	22. 21. 29.36	+ 3,004
H. C. 37589.....	69. 27	1	19. 38. 26.81	+ 2,615	Piazzi XXII. 169..	86. 16	3	22. 30. 58.78	+ 3,038
γ Aquilæ.....	79. 46	6	19. 38. 53.49	+ 2,851	* (Mag. 9).....	61. 54	4	22. 33. 1.07	+ 2,806
Σ 2577. <i>nf.</i>	69. 27	4	19. 39. 33.65	+ 2,616	B. xxii. 741.....	90. 2	3	22. 34. 27.74	+ 3,071
α AQUILÆ.....	81. 32	14	19. 43. 13.22	+ 2,925	o Pegasi.....	61. 30	3	22. 34. 29.25	+ 2,805
o Aquilæ.....	79. 58	2	19. 43. 36.21	+ 2,858	Σ 2936. <i>sp.</i>	89. 35	3	22. 35. 2.87	+ 3,067
Piazzi XIX. 307. <i>sf.</i>	80. 2	3	19. 44. 52.36	+ 2,860	* (Mag. 9).....	62. 5	4	22. 35. 52.27	+ 2,816
Σ 2596. <i>sf.</i>	75. 6	3	19. 46. 55.34	+ 2,753	B. xxii. 772.....	86. 56	2	22. 35. 56.80	+ 3,045
β AQUILÆ.....	83. 59	13	19. 47. 41.98	+ 2,945	* (Mag. 9, 10).....	62. 23	4	22. 41. 23.10	+ 2,835
16 Vulpeculæ.....	65. 30	3	19. 55. 26.89	+ 2,537	* (Mag. 8, 9).....	63. 12	4	22. 49. 29.35	+ 2,866
Σ 2620. <i>sf.</i>	78. 38	1	19. 56. 49.52	+ 2,836	* (Mag. 9).....	63. 34	1	22. 53. 17.68	+ 2,880
B.A.C. 6896.....	73. 19	4	19. 56. 57.32	+ 2,721	α PEGASI.....	75. 38	15	22. 57. 2.61	+ 2,978
Σ 2621. <i>sp.</i>	81. 12	3	19. 57. 6.43	+ 2,890	B. xxii. 1228.....	89. 4	1	22. 57. 32.06	+ 3,065
Σ 2622. <i>nf.</i>	73. 26	3	19. 57. 6.54	+ 2,724	A Piscium.....	88. 43	2	23. 0. 44.58	+ 3,063
15 Sagittæ.....	73. 21	4	19. 57. 8.39	+ 2,722	* (Mag. 8).....	66. 8	4	23. 8. 20.01	+ 2,938
θ Sagittæ*.....	69. 33	2	20. 3. 2.57	+ 2,642	H. C. 45649.....	65. 38	4	23. 11. 7.61	+ 2,942
Σ 2655. <i>n. or s.</i>	68. 14	3	20. 7. 18.51	+ 2,617	* (Mag. 9)†.....	66. 47	2	23. 14. 0.22	+ 2,956
α ² CAPRICORNI.....	103. 1	3	20. 9. 27.01	+ 3,332	* (Mag. 9).....	66. 45	4	23. 14. 49.84	+ 2,958
Σ 2662. <i>sp.</i>	79. 29	3	20. 11. 9.87	+ 2,862	B.A.C. 8154. <i>nf. or sf.</i>	99. 19	3	23. 15. 43.44	+ 3,113
Σ 2676. <i>np.</i>	63. 22	3	20. 16. 20.69	+ 2,515	Σ 3045. <i>nf.</i>	88. 24	1	23. 46. 29.38	+ 3,068
Piazzi XX. 177.....	79. 15	3	20. 23. 47.93	+ 2,865	Σ 3055. <i>sp. or sf.</i> ...	101. 17	1	23. 56. 3.68	+ 3,075
Σ 2698. <i>sf.</i>	62. 24	4	20. 27. 15.73	+ 2,511					

* The first of the three stars.

† The magnitude and N.P.D. are uncertain.

APPARENT NORTH POLAR DISTANCES

OBSERVED WITH THE

MURAL CIRCLE,

IN THE YEAR 1845.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	"	"		
Jan. 1	(a) ϵ Eridani.....	3. 25,9	22,3	26,9	20,0	26,1	25,9			84. 3. 24,73	30,098	37,6	34,7	99. 59. 14,20	B.
	(a) λ Tauri.....	2. 23,0	18,7	21,4	17,6	21,2	22,9			62. 2. 20,95	30,096	37,4	36,3	77. 57. 7,04	B.
Jan. 7	ω Geminorum.....	4. 36,8	36,7	38,9	33,0	36,8	35,1			116. 49. 36,25	30,186	42,8	39,3	65. 34. 16,20	B.
	ϵ Canis Minoris...	0. 27,3	30,0	29,0	24,7	28,6	28,8			131. 40. 28,07		42,5	38,4	80. 25. 31,77	B.
	ν Geminorum.....	1. 26,9	26,2	28,4	23,8	25,6	25,9			114. 1. 26,13				62. 46. 2,47	B.
	ϕ Geminorum.....	0. 51,0	50,0	52,7	48,2	49,1	48,3			114. 5. 49,88	30,176	41,8	37,1	62. 50. 26,38	B.
Jan. 13	i Persei R.....	3. 28,1	27,8	28,3	26,8	24,0	28,9	10,620	$+\frac{3}{4}$	271. 58. 19,06			41,3	34. 51. 46,24	B.
	i Persei.....	2. 41,2	38,2	41,2	37,0	38,9	38,2		$+\frac{1}{2}$	86. 7. 40,09				34. 51. 45,37	B.
	38 Arietis.....	2. 34,4	33,9	36,0	32,9	33,7	35,0		$+\frac{1}{2}$	129. 27. 34,46	29,518		41,0	78. 12. 32,61	B.
	(b) α Persei R.....	4. 26,1	27,7	23,2	25,0	24,7	27,9	12,386		266. 8. 40,62	29,520	42,3	41,5	40. 41. 30,64	B.
	(c) α Persei.....	2. 21,9	22,2	17,7	19,1	17,6	21,1			91. 57. 20,03				40. 41. 31,27	B.
	B. v. 623.....	0. 46,8	45,4	48,3	43,7	45,0	45,8			135. 10. 45,87	29,512	42,6	41,3	83. 55. 56,02	B.
	125 Tauri.....	2. 10,1	7,1	11,2	5,7	5,9	8,0		$+\frac{1}{2}$	115. 27. 8,47				64. 11. 46,83	B.
	(d) B. v. 925.....	3. 49,2	48,1	51,9	46,4	48,3	48,9		$+\frac{1}{2}$	133. 53. 49,15				82. 38. 56,64	B.
	B. v. 1015.....	0. 60,0	61,0	62,0	58,6	60,6	60,0		$+\frac{1}{2}$	133. 21. 0,61	29,516	42,6	41,5	82. 6. 6,98	B.
	δ Aurigæ.....	4. 60,9	59,0	64,0	56,4	59,1	59,9			87. 0. 0,10				35. 44. 7,29	B.
	15 Geminorum....	2. 39,9	36,9	40,1	34,7	36,9	37,9		$+\frac{1}{2}$	120. 22. 38,08	29,522	42,7	41,4	69. 7. 23,01	B.
Jan. 21	Aldebaran R.....	2. 16,8	16,8	16,9	14,9	14,7	18,7	9,850		233. 2. 24,19	30,168	37,1	30,5	73. 48. 27,58	B.
	Aldebaran.....	3. 35,0	33,8	38,0	32,1	34,1	35,9		$+\frac{1}{2}$	125. 3. 35,20				73. 48. 28,97	B.
	ϵ Aurigæ R.....	1. 17,9	16,1	18,4	16,4	15,0	19,0	12,261		260. 25. 34,54	30,176	36,9		46. 24. 42,03	B.
	ϵ Aurigæ.....	0. 24,0	20,4	24,7	18,9	19,3	21,8		$+\frac{1}{2}$	97. 40. 22,10				46. 24. 40,67	B.
	B. v. 303.....	3. 40,0	39,1	42,8	36,8	39,1	41,2		$+\frac{1}{2}$	137. 23. 40,07				86. 8. 58,11	B.
	(e) α Leporis.....	4. 29,5	28,4	33,3	26,8	28,9	31,8			159. 9. 30,05				107. 56. 27,19	B.
	δ Aurigæ.....	4. 61,7	57,0	63,8	56,0	57,1	60,0			86. 59. 59,57	30,180	36,6		35. 44. 6,66	B.
Jan. 24	(f) B. v. 294.....	0. 50,9	50,8	52,7	47,3	50,1	50,9		$+\frac{1}{2}$	136. 55. 50,57	29,820	41,5	39,5	85. 41. 5,48	B.
	ζ Tauri.....	2. 46,0	44,2	46,5	41,9	44,1	45,2		$+\frac{1}{2}$	120. 12. 45,12	29,824	41,3	39,0	68. 57. 30,36	B.
	B. v. 1015.....	0. 61,0	60,0	62,8	58,1	60,2	60,9			133. 21. 0,57				82. 6. 7,84	B.
	Σ 840.....	4. 32,2	30,2	34,2	28,1	30,1	33,0			130. 29. 31,57	29,826	40,5	38,7	79. 14. 33,36	B.
	ϵ Canis Minoris...	0. 31,1	30,7	32,1	29,5	30,2	31,9			131. 40. 31,12		39,7	39,5	80. 25. 35,04	B.
	Procyon R.....	3. 29,6	28,0	29,0	27,8	27,6	31,0	11,393		222. 28. 4,46				84. 23. 5,55	B.
	Procyon.....	2. 55,1	54,7	55,9	52,1	54,0	55,7		$+\frac{1}{2}$	135. 37. 54,76				84. 23. 6,77	B.
	ϕ Geminorum.....	0. 51,5	49,6	53,0	49,1	49,1	50,1			114. 5. 50,45	29,830	39,6	36,8	62. 50. 27,66	B.
	β Cancri R.....	0. 52,4	52,9	53,0	51,2	53,1	53,2	11,660		226. 30. 22,53	29,896	39,4	36,3	80. 20. 39,73	B.
	β Cancri.....	0. 38,2	37,9	38,8	35,0	37,8	37,9			131. 35. 37,63				80. 20. 41,89	B.
	α Ursæ Majoris R.	4. 15,8	14,2	16,4	14,2	14,0	17,7	12,149		278. 3. 35,28				28. 46. 22,49	B.
	α Ursæ Majoris...	2. 26,1	25,2	27,0	22,4	24,8	26,9			80. 2. 25,55				28. 46. 25,32	B.
	ν Ursæ Majoris R.	2. 28,0	22,1	24,2	21,4	22,5	25,0	15,350	$+\frac{1}{2}$	276. 35. 36,99				30. 14. 22,35	B.
	ν Ursæ Majoris...	0. 25,1	22,7	27,7	20,6	22,4	24,7		$+\frac{1}{2}$	81. 30. 25,50				30. 14. 26,84	B.
Feb. 17	(g) Capella R.....	1. 27,9	27,8	28,8	25,3	27,1	29,3	13,512		262. 40. 19,14	29,912	35,0	30,9	44. 9. 55,90	B.
	Capella.....	0. 38,7	36,2	40,1	33,9	37,3	35,2		$+\frac{1}{2}$	95. 25. 37,17				44. 9. 52,25	B.
	(h) Σ 734.....	4. 35,4	35,3	38,8	32,1	36,9	35,6			143. 4. 35,97			30,0	91. 50. 7,86	B.
	15 Geminorum...	3. 27,1	26,8	27,9	26,4	25,9	25,4	12,631		120. 22. 36,51	29,910	34,9	29,3	69. 7. 21,86	B.
	δ Ursæ Min. SP. R.	2. 24,0	24,6	23,7	23,8	22,3	25,7	20,751		310. 13. 45,90	29,912	34,8	28,9	- 3. 24. 30,91	B.
	(i) δ Ursæ Minoris SP.	2. 19,0	15,4	17,8	13,7	14,9	15,9			47. 52. 13,72				- 3. 24. 31,25	B.
Feb. 21	(k) Polaris R.....	4. 13,4	13,6	14,8	12,6	11,3	14,6	11,640		305. 18. 43,90	29,790	36,7	40,2	1. 30. 40,91	B.
	Polaris.....	2. 17,7	15,9	16,9	12,1	13,7	16,8			52. 49. 15,66				1. 30. 40,51	B.
	ϵ Orionis.....	2. 61,1	60,6	64,3	59,1	60,8	60,0		$+\frac{1}{2}$	142. 33. 1,16	29,714	34,9	29,4	91. 18. 31,03	B.
	B. v. 1015.....	0. 62,9	62,1	64,8	59,2	62,3	60,1			133. 21. 1,97				82. 6. 9,22	B.
	1 Lyncis R.....	4. 22,8	24,1	24,0	21,1	20,9	23,6	12,790	$-\frac{1}{2}$	278. 23. 27,35	29,700	34,7	29,7	28. 26. 30,97	B.
	1 Lyncis.....	2. 34,1	33,4	35,9	30,0	32,6	32,7		$-\frac{1}{2}$	79. 42. 33,56				28. 26. 31,92	B.
	(l) η Geminorum.....	3. 30,7	29,7	31,4	25,0	29,1	27,8	12,790		118. 42. 34,60				67. 27. 17,29	B.
	(m) γ Geminorum R...	2. 18,0	18,1	17,6	15,8	17,1	17,1		$-\frac{1}{2}$	233. 22. 17,25	29,698	34,5	29,0	73. 28. 34,42	B.
	γ Geminorum.....	3. 43,0	42,0	45,2	38,9	43,0	41,0		$+\frac{1}{2}$	124. 43. 42,43				73. 28. 34,14	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10",162, 10",187, 10",212, 10",227, 10",245 at the five wires. From Jan. 21 = 10",164, 10",189, 10",214, 10",229, 10",247. From Feb. 17 = 10",173, 10",193, 10",219, 10",237, 10",256. ONE REVOLUTION = 20",850. CORRECTION for RUNS = + 1",9. From Jan. 7 = + 0",2. From Jan. 13 = + 1",3. From Jan. 21 = + 1",8. From Feb. 17 = + 1",9. ZENITH POINT = 21° 53' 13",08. From Jan. 7 = 89° 3' 0",01. From B. v. 623. Jan. 13 = 89° 2' 59",00. From Feb. 17 = 89° 2' 59",98. ASSUMED CO-LATITUDE = 37° 47' 8",28. On Jan. 4, the Circle was taken from the wall, the pivots were cleaned, the Telescope was shifted on the Circle, and the axis of motion was adjusted to horizontality. On Jan. 6, the Error of Collimation was corrected, the Microscopes were adjusted, and the Zenith Point was found by the Collimating eye-piece.

(a) Clouds. (b) Faint from haze. (c) Between this and the next observation the fixed wire was equatorially adjusted. (d) Faint. (e) Unsteady. (f) Doubtful from faintness. (g) Haze and bad definition. (h) Hazy: did not appear double. (i) Times by M, 6h. 25m. 46s. and 6h. 27m. 4s. M fast on H, 1m. 43s. (k) Unsteadiness. Times by M, 1h. 2m. 20s. and 1h. 3m. 22s. M fast on H, 0m. 59s. (l) Supposed to be taken on the micrometer wire as left in the preceding observation. (m) Accidentally bisected by the fixed wire at the first wire.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.		Observer.
		A	B	C	D	E	F					Int.	Ext.			
		"	"	"	"	"	"					Inch.	°	°	°	
Feb. 24	(a) ω Geminorum...	4.36,9	33,7	37,7	30,9	33,0	32,5	10,652	+3	116.49.34,75	29,900	35,3	30,9	65.34.15,45	B.	
	δ Geminorum R...	1.26,8	26,9	25,3	25,9	25,1	27,4			239.6.18,01	29,912	35,0	30,2	67.44.24,79	B.	
	(a) δ Geminorum...	4.40,3	38,2	40,9	33,9	37,9	37,0			118.59.39,32				67.44.23,08	B.	
	Pollux R.....	4.29,2	28,8	28,1	24,5	26,9	29,3	11,158	+4	245.14.8,78	29,924	34,8	29,7	61.36.25,88	B.	
	Pollux.....	1.50,9	47,8	51,6	45,0	47,4	46,1			112.51.48,38				61.36.24,00	B.	
	ϵ Leonis R.....	0.22,4	21,9	20,3	17,9	20,1	22,1			241.19.30,09	29,808	38,8	35,9	65.31.9,15	B.	
	ϵ Leonis.....	1.29,7	27,8	29,0	22,9	27,6	26,0	12,649	+1½	116.46.27,52				65.31.7,72	B.	
Feb. 28	λ Tauri.....	2.11,4	8,9	12,6	7,9	7,6	8,0	13,048	+2	129.12.8,52	29,908	36,6	31,7	77.57.8,34	B.	
	α Camelopardi R...	0.19,9	21,2	20,0	19,2	15,9	18,8			282.54.20,15	29,918	36,0	31,1	23.55.32,69	B.	
	α Camelopardi....	1.44,9	42,0	44,1	39,9	41,1	41,1			75.11.42,42				23.55.36,22	B.	
	(b) Capella R.....	1.44,5	44,1	44,1	43,4	41,2	43,9	14,201	+3	262.40.20,86	29,924	35,7	30,7	44.9.53,73	B.	
	Capella.....	0.39,8	36,0	39,8	34,9	36,6	35,0			95.25.38,49				44.9.54,04	B.	
	B. v. 294.....	0.51,9	52,0	52,9	49,9	50,0	50,1			136.55.51,26				85.41.7,11	B.	
	* R. 5 ^h . 26 ^m . 26 ^s ..	3.22,5	20,0	22,8	17,9	20,1	20,3	6,780	+1¼	134.48.21,05		35,4	30,6	83.33.32,12	B.	
	B. v. 1359.....	1.23,2	22,2	25,0	20,9	21,7	21,4			132.11.22,62	29,922	35,2		80.56.28,25	B.	
	β Canis Majoris R.	3.26,5	26,1	26,6	24,1	24,7	25,2			198.59.37,65	29,920	35,0	30,5	107.53.16,17	B.	
	β Canis Majoris...	1.22,1	21,1	23,3	20,1	21,2	21,9	10,340	+1	159.6.21,75				107.53.16,53	B.	
	γ Geminorum R...	2.23,1	21,8	21,9	19,0	20,0	21,1			233.22.18,88	29,918			73.28.32,51	B.	
	γ Geminorum.....	3.43,6	41,0	45,1	38,7	41,4	39,8			124.43.42,45				73.28.34,80	B.	
	(c) ν Geminorum.....	1.27,4	24,0	28,0	22,1	22,6	22,9	11,360	+2¾	114.1.24,68	29,916	34,8	30,4	62.46.1,73	B.	
	Procyon R.....	3.26,6	24,2	26,7	25,6	25,0	26,7			222.28.2,43	29,848	34,9	32,3	84.23.9,10	B.	
	(d) Procyon.....	2.57,6	56,1	59,0	54,6	56,6	55,9			135.37.57,05				84.23.9,54	B.	
Mar. 3	α Persei R.....	4.24,2	20,2	24,3	21,0	19,4	23,1	12,238	+1	266.8.40,83	29,696	35,1	27,9	40.41.30,05	B.	
	α Persei.....	2.25,6	19,9	25,3	19,0	20,7	20,9			91.57.22,49				40.41.34,33	B.	
	γ Tauri R.....	0.29,8	25,2	26,5	26,0	26,1	28,2			232.5.45,95	29,716	30,6	25,5	74.45.7,70	B.	
	γ Tauri.....	0.15,6	14,4	16,9	13,9	14,0	14,9	9,317	+3	126.0.14,98				74.45.9,59	B.	
	(e) B. v. 294.....	0.53,1	49,8	53,5	48,9	49,6	51,0			136.55.51,23	29,744	28,6	23,9	85.41.7,65	B.	
	* R. 5 ^h . 26 ^m . 26 ^s ..	3.22,5	18,1	23,1	17,2	19,2	21,5			134.48.20,85	29,750	27,8	23,3	83.33.32,53	B.	
	B. v. 925.....	3.51,1	46,7	53,0	45,9	47,5	48,3	10,998		133.53.49,42				82.38.59,13	B.	
	α Orionis R.....	3.41,2	37,6	40,9	35,0	39,0	38,1			224.13.23,13	29,756	27,6	22,5	82.37.45,69	B.	
	α Orionis.....	2.38,2	34,1	39,8	33,9	35,0	35,9			133.52.36,62				82.37.46,40	B.	
Mar. 4	(f) Aldebaran R.....	2.36,7	33,8	35,9	33,8	33,4	35,7	10,841		233.2.22,48	29,850	32,8	24,5	73.48.29,91	B.	
	Aldebaran.....	3.33,2	30,9	36,2	30,1	31,7	30,8			125.3.32,77				73.48.26,12	B.	
	η Aurigæ R.....	2.25,5	22,1	24,8	21,6	21,1	24,2			257.51.31,19	29,846	30,7	23,4	48.58.48,78	B.	
	η Aurigæ.....	4.29,6	25,0	32,0	24,9	27,2	25,8	12,739		100.14.28,22				48.58.49,15	B.	
	B. v. 324.....	0.28,1	24,9	29,0	23,3	26,7	26,2			136.0.26,43	29,844	29,9	22,4	84.45.41,13	B.	
	* R. 5 ^h . 26 ^m . 26 ^s ..	3.18,1	15,2	19,2	13,2	16,7	16,8			134.48.17,12		29,4	22,6	83.33.29,09	B.	
	B. v. 1338.....	3.33,2	30,4	36,0	28,8	31,2	31,0	6,351		132.8.32,38		29,8	22,9	80.53.38,70	B.	
	(g) β Canis Majoris R.	3.20,9	18,1	22,1	17,9	18,8	19,9			198.59.40,95	30,012	24,0	17,1	107.53.18,27	B.	
	(h) β Canis Majoris...	1.18,9	15,4	20,7	15,9	17,3	18,0			159.6.17,93				107.53.18,11	B.	
Mar. 6	Pollux R.....	4.42,4	41,1	43,0	38,0	39,7	41,1	11,619		245.14.12,63	30,180	26,1	22,7	61.36.22,66	B.	
	Pollux.....	1.50,8	46,0	52,2	46,6	46,6	44,2			112.51.48,05				61.36.24,30	B.	
Mar. 7	Capella R.....	1.18,7	17,6	19,9	16,2	16,9	18,5	12,952	+1½	262.40.21,41	30,142	31,9	29,9	44.9.53,24	B.	
	Capella.....	0.40,4	36,6	40,6	34,9	38,1	36,7			95.25.38,33				44.9.53,94	B.	
	B. v. 324.....	0.29,0	27,2	29,3	25,9	28,0	28,7			136.0.28,10				84.45.42,40	B.	
	* R. 5 ^h . 26 ^m . 26 ^s ..	3.21,4	18,9	22,5	16,3	20,0	20,7	10,115	+1½	134.48.20,59		31,8	29,4	83.33.32,27	B.	
	α Orionis R.....	3.21,9	20,9	20,5	17,0	20,2	21,4			224.13.23,18	30,140	31,5	28,4	82.37.45,65	B.	
	α Orionis.....	2.38,0	35,9	38,8	33,7	37,2	36,9			133.52.37,30				82.37.47,09	B.	
	(i) B. v. 1338.....	3.34,6	33,1	37,0	30,5	34,4	33,2	11,660	+3	132.8.34,65				80.53.40,86	B.	
	Procyon R.....	3.35,6	34,0	35,3	32,0	34,6	35,0			222.28.5,10	30,138	30,6	25,1	84.23.8,04	B.	
	(k) Procyon.....	2.55,1	53,8	56,9	49,9	54,6	53,0			135.37.54,40				84.23.8,50	B.	
Mar. 8	σ Ursæ Majoris R.	4.26,9	24,9	26,7	22,9	23,1	25,9	12,226		278.3.44,11	30,166	30,8	29,3	28.46.13,95	B.	
	σ Ursæ Majoris...	2.18,1	14,1	18,4	12,0	15,1	15,7			80.2.15,97				28.46.14,99	B.	
	ρ^3 Cancri.....	0.23,8	22,0	24,0	20,7	22,1	21,6	12,158		112.44.42,10	30,164	31,2	29,2	61.29.17,81	B.	
	(l) σ^8 Cancri.....	4.60,9	57,4	62,1	55,3	59,6	56,8			125.4.58,68				73.49.52,09	B.	

MICROMETER READING for COINCIDENCE with Fixed Wire = 10', 170, 10', 190, 10', 216, 10', 234 10', 253 at the five wires.
 From March 3 = 10', 187, 10', 205, 10', 224, 10', 233, 10', 252. ONE REVOLUTION = 20', 850. CORRECTION for RUNS = + 4", 1.
 From March 3 = + 5", 3. ZENITH POINT = 89°. 2'. 59", 52. ASSUMED CO-LATITUDE = 37°. 47'. 8", 28.

(a) Clouds. (b) Disturbed mercury. (c) Hard to bisect, so badly defined. (d) Bad definition. (e) Star faint and bisection doubtful. (f) Badly defined and unsteady. (g) Indefinite image. (h) Night very bad for observations: Temperature at 13°, 8 F.
 (i) Faint. (k) Flaring. (l) No correction for Runs.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.			Observer.
		A	B	C	D	E	F					Int.	Ext.				
		"	"	"	"	"	"	r.		° ' "	Inch.	°	°	° ' "	"	"	
Mar. 8	66 Cancri	4. 27,0	22,9	29,0	20,2	24,8	24,8	8,120	+2	108. 24. 25,57	30,164	31,2	29,2	57. 8. 55,90			B.
	83 Cancri	3. 54,0	49,7	54,8	46,8	49,9	49,9			122. 53. 51,52	30,168	31,0		71. 38. 41,46			B.
	(a) α Hydræ R.	1. 30,1	29,4	29,9	25,8	29,6	28,1			208. 52. 12,95				97. 59. 41,66			B.
	α Hydræ	3. 46,9	45,0	49,1	41,1	45,9	45,0			149. 13. 46,08				97. 59. 41,65			B.
	Σ 1396	2. 42,9	41,8	44,6	39,9	41,1	41,9	14,111	+1	129. 51. 21,69	30,170		29,4	78. 36. 23,42			B.
	B.A.C. 3398	0. 20,7	17,7	20,9	15,1	18,9	18,0		+3	131. 35. 18,83				80. 20. 23,88			B.
	γ Leonis	3. 6,2	2,1	8,0	0,6	4,1	2,9			120. 38. 4,53		30,9	29,5	69. 22. 51,02			B.
	42 Leonis Min. R. .	0. 28,7	27,0	26,8	24,8	27,1	27,9	11,260		248. 20. 5,52				58. 30. 25,50			B.
	42 Leonis Minoris.	0. 56,8	52,9	56,7	50,2	53,0	52,5		+1½	109. 45. 54,00				58. 30. 25,98			B.
Mar. 11	B. v. 1359	1. 24,2	22,9	24,9	20,1	23,2	22,1	6,898		132. 11. 22,95	29,848	35,0	32,2	80. 56. 28,61			B.
	β Canis Majoris R. .	3. 26,8	25,9	26,9	23,2	25,0	25,1			198. 59. 34,74	29,846	34,9	32,9	107. 53. 17,46			B.
	β Canis Majoris ..	1. 25,1	24,0	27,0	21,7	26,3	24,1			159. 6. 24,75				107. 53. 18,65			B.
	ζ Geminorum R. .	3. 29,9	28,9	27,4	25,3	28,1	29,1	11,121		237. 38. 9,31	29,848	34,8	32,0	69. 12. 35,00			B.
	ζ Geminorum	2. 52,3	49,0	53,0	44,9	49,5	46,9			120. 27. 49,38				69. 12. 35,39			B.
	Pollux R.	4. 8,1	6,7	6,8	3,0	4,4	6,9	10,060	+½	245. 14. 9,42	29,844	34,7	31,4	61. 36. 24,70			B.
	Pollux	1. 50,1	46,8	51,0	43,3	47,1	44,1		+3	112. 51. 47,86				61. 36. 23,68			B.
	(b) Σ 1200	1. 41,9	41,0	38,1	41,9	45,9	37,4			91. 1. 41,10				39. 45. 52,32			B.
	γ Leonis	3. 8,3	5,2	10,1	1,8	5,2	4,2			120. 38. 5,92	29,820	32,8	30,9	69. 22. 52,23			B.
Mar. 12	(c) β Cancri R.	0. 30,1	29,0	27,9	28,0	27,8	28,3	10,553	+2	226. 30. 21,44	29,708	33,1	29,8	80. 20. 41,38			B.
	β Cancri	0. 41,1	39,1	40,8	36,5	39,0	38,5			131. 35. 39,31				80. 20. 43,83			B.
	ρ³ Cancri	4. 44,0	39,0	46,0	36,9	39,9	39,9			112. 44. 41,13	29,710	33,2	29,8	61. 29. 16,77			B.
	σ² Ursæ Majoris ..	0. 47,0	43,0	47,2	40,9	43,8	43,0			73. 30. 44,18				22. 14. 36,51			B.
	(c) 83 Cancri	3. 55,1	49,6	55,9	47,1	51,2	49,1		+1	122. 53. 51,53				71. 38. 41,16			B.
	(c) φ Ursæ Majoris ..	3. 58,1	52,8	58,7	50,8	52,8	53,1		+1	86. 28. 54,74	29,714	32,9	29,8	35. 13. 1,16			B.
Mar. 13	(d) Castor R.	4. 24,0	19,9	22,9	19,1	17,1	22,0	11,929	+2	249. 3. 45,44	29,666	22,8	16,9	57. 46. 44,55			B.
	Castor	2. 15,2	11,0	16,7	9,2	10,0	9,0		+4½	109. 2. 13,09				57. 46. 44,78			B.
	(d) β Cancri R.	0. 36,1	34,1	34,0	33,2	31,9	32,9	10,641		226. 30. 24,79	29,668	23,9	16,0	80. 20. 39,62			B.
	β Cancri	0. 40,1	37,9	41,1	35,2	37,1	36,0		+1½	131. 35. 37,98				80. 20. 44,09			B.
	Piazzi VIII. 131. np.	0. 63,0	57,1	64,5	55,3	57,6	55,2			91. 50. 58,82			15,8	40. 35. 10,99			B.
Mar. 14	(e) ε Aurigæ R.	1. 32,0	29,5	32,0	29,0	28,9	30,6	12,790	+1	260. 25. 36,87	29,572	30,0	31,8	46. 24. 40,34			B.
	ε Aurigæ	0. 23,9	20,7	25,0	18,4	20,9	19,5		+2½	97. 40. 22,33				46. 24. 39,84			B.
	(f) ο Ursæ Majoris R. .	4. 37,7	35,0	38,7	33,9	33,1	35,9	12,683	+½	278. 3. 44,82	29,592	28,9	26,0	28. 46. 13,69			B.
	ο Ursæ Majoris ..	2. 17,7	13,1	19,8	11,2	14,4	13,5		+2	80. 2. 16,28				28. 46. 15,09			B.
Mar. 17	Σ 205	0. 9,4	4,1	8,7	2,7	6,0	3,1			99. 35. 5,68	29,640	30,9	30,0	48. 19. 25,31			B.
	φ Ursæ Majoris ..	3. 58,1	53,4	58,1	50,9	53,9	53,0			86. 28. 54,97				35. 13. 0,70			B.
	B.A.C. 3398	0. 22,1	20,4	22,0	15,9	20,0	19,1			131. 35. 19,95			29,3	80. 20. 23,69			B.
	(g) Σ 1404	1. 27,1	23,9	28,0	21,6	25,8	24,0			142. 11. 25,22				90. 56. 53,98			B.
	B.A.C. 3476	2. 51,0	48,9	53,0	44,9	49,1	48,1			147. 47. 49,45	29,638	30,7	28,6	96. 33. 37,14			B.
	δ Leonis R.	3. 25,2	23,8	24,5	19,9	23,8	24,9	11,982		238. 12. 47,23	29,642	29,7	27,7	68. 37. 57,03			B.
	δ Leonis	3. 16,0	12,1	15,5	8,0	11,9	11,0			119. 53. 12,75				68. 37. 57,31			B.
	ι Leonis	2. 23,4	21,1	23,7	17,2	20,0	20,8			129. 52. 21,27	29,640	29,7	27,3	78. 37. 22,00			B.
	υ Leonis R.	2. 23,7	21,1	22,6	17,8	21,7	20,9	8,260		216. 53. 2,34				89. 58. 23,68			B.
	υ Leonis	2. 61,0	58,0	60,5	54,9	58,6	58,0		+1½	141. 12. 58,82				89. 58. 25,14			B.
	χ Ursæ Majoris R. .	4. 23,9	21,6	24,2	19,3	20,9	23,5	13,394	+1½	265. 28. 16,41				41. 21. 55,51			B.
	χ Ursæ Majoris ..	2. 46,0	40,9	44,8	38,8	41,8	41,1		+3	92. 37. 44,06				41. 21. 56,28			B.
	Σ 1576	4. 29,9	25,0	29,3	22,0	25,0	25,6			109. 34. 26,58		29,0	26,7	58. 18. 57,72			B.
	δ Ursæ Majoris R. .	4. 14,9	12,9	14,8	11,9	10,1	13,9	12,450		274. 43. 26,96	29,642	28,9	26,6	32. 6. 35,14			B.
	(h) δ Ursæ Majoris ..	2. 37,8	33,1	37,1	30,3	34,0	32,9			83. 22. 34,47				32. 6. 36,87			B.
Mar. 20	ζ Geminorum R. .	3. 27,2	26,1	25,0	24,1	26,1	26,1	11,021	+1	237. 38. 9,49	30,196	33,8	32,8	69. 12. 35,89			B.
	ζ Geminorum	2. 51,5	48,8	50,7	44,9	49,7	46,2		+3	120. 27. 49,43				69. 12. 35,11			B.
	(i) Σ 1324	1. 50,5	46,7	51,1	43,3	46,8	45,0		+1	114. 26. 47,49	30,250	33,4	31,6	63. 11. 25,01			B.
	α Hydræ R.	1. 47,1	46,7	46,8	43,5	46,2	45,0	8,970		208. 52. 12,07				97. 59. 42,61			B.
	α Hydræ	3. 49,0	48,0	50,7	43,0	47,8	45,9		+2	149. 13. 47,72				97. 59. 42,70			B.
	(k) Σ 1404	3. 39,9	37,9	42,1	35,9	39,1	38,8	2,292	+2	142. 11. 26,07	30,258	33,0	31,1	90. 56. 56,18			B.
	B.A.C. 3476	2. 25,1	23,2	26,9	20,1	25,1	23,1	9,064		147. 47. 48,21				96. 33. 37,44			B.
	(l) Σ 213	4. 20,0	15,9	21,4	14,0	17,2	16,1		+1½	113. 4. 18,06				61. 48. 53,83			B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',187, 10',205, 10',224, 10',233, 10',252 at the five wires. From March 11 = 10',176, 10',194, 10',213, 10',222, 10',241. From March 14 = 10',180, 10',198, 10',217, 10',226, 10',245. ONE REVOLUTION = 20'',850. CORRECTION for RUNS = + 5'',3. From March 11 = + 1'',2. From March 14 = + 3'',1. ZENITH POINT = 89°. 2'. 59'',52. From Mar. 11 = 89°. 2'. 59'',15. From Mar. 14 = 89°. 2'. 59'',85. ASSUMED CO-LATITUDE = 37°. 47'. 8'',28.

(a) Very unsteady and badly defined. (b) Probably the north star: See observations of 1843. (c) Faint from cloud. (d) Very indistinct, the atmosphere being hazy. (e) Faint. (f) Clouds passing. (g) 'No other star seen.' The pointer reading has been increased by 5': See March 20. The star appears to be B. ix. 1226. (h) Bisection not satisfactory. (i) 'Very faint: no other star in the field.' The companion, which is very small, was not seen. (k) Not perceived to be double. (l) Hazy.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Mar. 20	(a) γ Leonis. <i>np.</i>	2. 65,6	62,9	67,1	58,9	63,1	61,7			120. 38. 3,53	30,258	33,0	31,1	69. 22. 49,67	B.
	B.A.C. 3831.....	1. 57,1	53,6	57,8	50,7	54,0	52,0			120. 16. 54,40	30,272	32,6	30,4	69. 1. 40,10	B.
	ξ Ursæ Majoris. <i>np.</i>	1. 43,7	39,1	43,8	37,0	40,0	38,1			108. 51. 41,34				57. 36. 11,91	B.
	(b) Σ 1564.....	1. 61,0	57,3	60,9	56,9	57,1	57,5	10,826		113. 26. 45,95	30,280	32,6	30,5	62. 11. 22,26	B.
	χ Ursæ Majoris R.....	4. 37,1	35,3	38,3	33,8	34,0	37,5	14,019		265. 28. 17,21				41. 21. 54,76	B.
	χ Ursæ Majoris.....	2. 45,8	40,9	45,7	38,8	42,0	41,0		+1 $\frac{1}{4}$	92. 37. 42,92				41. 21. 55,19	B.
	(c) δ Ursæ Majoris R.....	4. 22,8	20,8	22,9	20,9	19,0	22,7	12,849		274. 43. 27,09	30,282	32,4	29,9	32. 6. 34,92	B.
	δ Ursæ Majoris.....	3. 34,9	30,1	34,0	27,9	31,6	30,2		+2	83. 22. 32,68				32. 6. 34,99	B.
	(d) δ Ursæ Min. SP. R.....	0. 26,4	21,5	22,0	21,9	20,9	24,0	14,629		310. 13. 50,90	30,046	44,8	43,4	- 3. 24. 35,55	B.
	δ Ursæ Minoris SP.....	2. 15,2	8,2	12,0	6,4	10,1	10,4			47. 52. 9,78				- 3. 24. 32,83	B.
Mar. 24	B.A.C. 3506.....	4. 55,2	49,7	54,0	48,1	50,0	50,0		+3	122. 44. 51,73	30,068	42,2	37,6	71. 29. 41,12	B.
	(e) B.A.C. 3831.....	1. 57,8	52,1	55,4	51,0	51,9	51,9		+2	120. 16. 53,62	30,064	41,7	37,1	69. 1. 39,41	B.
	ξ Ursæ Majoris. <i>np.</i>	1. 45,9	40,1	43,9	37,1	40,6	39,8			108. 51. 41,27				57. 36. 12,26	B.
Mar. 26	\circ Ursæ Majoris R.....	4. 22,5	20,6	20,9	20,0	18,4	21,4	11,792	$\frac{3}{4}$	278. 3. 47,70	29,800	45,5	43,9	28. 46. 10,23	B.
	\circ Ursæ Majoris.....	2. 16,9	11,3	15,0	10,9	13,0	12,0		+2	80. 2. 14,33				28. 46. 14,30	B.
	(f) A Hydræ.....	1. 47,9	44,9	46,0	42,3	46,1	43,8		+3	145. 41. 45,11	29,788	44,6	43,1	94. 27. 23,63	B.
	(g) B. ix. 627.....	2. 50,9	47,1	49,0	44,2	47,9	46,9			136. 2. 47,73	29,780		43,4	84. 48. 0,06	B.
	ϕ Ursæ Majoris.....	3. 59,2	53,0	56,6	51,1	52,9	52,4			86. 28. 54,28	29,776	44,3	43,0	35. 13. 0,94	B.
Mar. 28	\circ Ursæ Majoris R.....	4. 22,7	20,9	19,7	18,9	17,1	19,0	11,687		278. 3. 48,98	29,580	47,8	45,1	28. 46. 9,04	B.
	\circ Ursæ Majoris.....	2. 17,8	12,7	15,7	12,0	13,1	12,2			80. 2. 13,97				28. 46. 14,03	B.
	H. C. 17139.....	0. 23,0	18,9	20,5	16,4	18,4	15,9			124. 15. 18,85	29,588	46,9	45,0	73. 0. 9,25	B.
	B. ix. 176.....	0. 25,1	23,0	24,1	21,6	23,8	21,2			145. 0. 23,15	29,598	46,6		93. 45. 58,55	B.
	Σ 1507.....	4. 21,8	17,2	20,9	16,4	17,1	18,8	14,380	+1	133. 22. 52,02	29,606	44,7	43,0	82. 7. 58,47	B.
	B. x. 1053.....	1. 50,4	46,1	49,1	45,6	47,0	46,0		+3	133. 16. 47,61				82. 1. 53,86	B.
	ρ^s Leonis.....	3. 38,0	33,1	35,9	32,0	33,4	33,1			140. 28. 34,33	29,610	44,8		89. 13. 56,94	B.
	(h) Σ 1530.....	2. 45,0	40,6	43,2	39,2	41,8	41,0			147. 17. 41,87				96. 3. 25,52	B.
	Piazzi XI. 181.....	2. 65,9	58,2	63,3	58,8	58,1	58,8		+4 $\frac{1}{4}$	91. 28. 4,18	29,638	44,7	43,1	40. 12. 15,96	B.
	Piazzi XIII. 163.....	4. 40,5	34,9	39,5	32,7	35,2	34,8			112. 24. 36,37	29,764	43,8	41,9	61. 9. 11,15	B.
	η Ursæ Majoris R.....	1. 22,1	19,9	19,6	18,4	16,1	17,7	13,288		266. 55. 14,78				39. 54. 54,67	B.
	η Ursæ Majoris.....	0. 50,5	44,0	48,4	43,8	44,8	43,1		+1 $\frac{1}{2}$	91. 10. 46,18				39. 54. 57,67	B.
Mar. 29	β Tauri R.....	4. 21,9	18,9	17,1	17,4	16,0	18,0	11,820		245. 18. 45,01	30,108	50,1	51,5	61. 31. 49,55	B.
	β Tauri.....	2. 15,9	10,7	14,5	9,1	11,1	7,1		+2 $\frac{3}{4}$	112. 47. 12,14				61. 31. 45,60	B.
	B.A.C. 3017.....	3. 23,1	20,1	20,1	18,2	17,1	17,8	12,492	-1 $\frac{1}{2}$	120. 42. 31,68	30,220	47,6	44,7	69. 27. 16,12	B.
	(i) B. ix. 627.....	2. 51,8	46,9	48,1	44,6	46,4	45,9			136. 2. 47,42	30,226	46,6	43,9	84. 47. 59,05	B.
	Σ 1507.....	2. 66,2	61,1	64,1	60,2	61,0	58,9			127. 28. 2,07		46,1	43,5	76. 12. 57,13	B.
	(k) Regulus R.....	4. 26,3	22,1	22,1	19,7	20,1	22,6	11,124		229. 34. 3,45		45,9	43,4	77. 16. 54,56	B.
	Regulus.....	1. 63,7	58,0	60,1	55,2	57,2	55,0		+1	128. 31. 58,34				77. 16. 55,25	B.
	α Ursæ Majoris R.....	1. 28,8	25,7	24,5	24,2	21,9	23,8	14,151		279. 25. 2,85	30,228	45,0	41,5	27. 24. 54,95	B.
	α Ursæ Majoris.....	0. 65,9	60,0	62,1	58,6	59,8	57,1			78. 41. 0,63				27. 24. 57,33	B.
	ρ^s Leonis.....	3. 37,0	32,0	34,6	31,0	32,8	30,9		+2	140. 28. 33,24				89. 13. 56,03	B.
	(l) Piazzi XI. 27.....	0. 66,1	58,2	62,3	59,1	58,4	57,1		+3	98. 6. 0,81	30,232	44,9	40,9	46. 50. 18,11	B.
	(m) * \mathcal{R} . 11 ^h . 38 ^m . 50 ^s	0. 51,1	43,8	47,0	42,9	45,1	43,1			134. 30. 45,53	30,234	44,6	40,4	83. 15. 54,30	B.
	Piazzi XI. 181.....	2. 69,0	59,9	65,3	61,0	59,6	60,1		+2	91. 28. 3,34				40. 12. 13,61	B.
Mar. 31	(n) Sirius R.....	3. 26,9	23,8	22,9	23,2	22,3	22,1	14,556		200. 21. 53,22	30,196	50,0	49,4	106. 30. 45,52	B.
	Sirius.....	4. 9,1	5,0	9,0	4,8	6,9	3,7			157. 44. 6,62				106. 30. 44,26	B.
	Procyon R.....	3. 17,1	12,1	12,5	12,1	12,1	12,1	10,784		222. 28. 1,34	30,204	47,9	45,1	84. 23. 10,27	B.
	Procyon.....	2. 63,1	57,2	60,4	56,0	58,1	56,1		+1	135. 37. 56,98				84. 23. 7,49	B.
	B. VIII. 644.....	4. 15,9	10,1	13,7	10,0	10,7	9,6	14,358		129. 27. 45,54	30,212	46,7	42,4	78. 12. 44,17	B.
	A ¹ Cancri.....	1. 22,2	14,9	19,0	14,9	16,0	13,9		+3	128. 1. 17,20				76. 46. 13,30	B.
	B.A.C. 3017.....	3. 27,1	21,9	24,0	21,4	21,5	21,3	12,779		120. 42. 29,61	30,216	46,0	42,2	69. 27. 14,24	B.
	(o) * \mathcal{R} . 8 ^h . 45 ^m . 8 ^s	1. 41,7	36,9	37,6	34,2	34,9	34,0		+4 $\frac{1}{4}$	120. 26. 37,79				69. 11. 22,04	B.
	B. ix. 176.....	0. 22,9	18,8	20,6	17,6	18,4	17,0			145. 0. 19,22	30,220	45,9	41,3	93. 45. 55,51	B.
	(p) B. ix. 298.....	2. 62,2	59,6	61,8	56,1	58,9	57,1			143. 22. 59,43				92. 8. 30,56	B.
	(q) A Hydræ.....	1. 52,3	48,9	49,8	45,9	47,8	46,3		+2	145. 41. 48,54				94. 27. 27,16	B.
	B. ix. 627.....	2. 50,2	45,8	47,9	43,8	45,7	44,7			136. 2. 46,48				84. 47. 58,45	B.
	B. ix. 929.....	4. 57,2	52,9	57,1	51,0	53,0	52,6		+1	126. 24. 54,26	30,228	45,8	40,1	75. 9. 47,89	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10', 180, 10', 198, 10', 217, 10', 226, 10', 245 at the five wires. From March 24 = 10', 171, 10', 189, 10', 208, 10', 217, 10', 236. From March 29 = 10', 180, 10', 198, 10', 217, 10', 226, 10', 245. ONE REVOLUTION = 20'', 850. CORRECTION for RUNS = + 3'', 1. From March 24 = + 0'', 7. From March 29 = + 1'', 5. ZENITH POINT = 89°. 2'. 59'', 85. From Mar. 24 = 89°. 2'. 58'', 98. From Mar. 29 = 89°. 3'. 0'', 55. ASSUMED CO-LATITUDE = 37°. 47'. 8'', 28.

(a) 'Very close.' (b) Called *nf*, which is the smaller. The angle of position is 86°. (c) The micrometer reading was 1' greater. (d) Faint. Times by M, 6^h. 25^m. 4^s and 6^h. 25^m. 54^s M fast on H, 2^m. 11^s. (e) Damp on the eye-glass. (f) Very faint: bisection uncertain. (g) Cloudy. (h) Another preceded about 20". (i) Judged to be of Mag. 7. (k) Faint from clouds. (l) Very cloudy. A small star preceded about 15". (m) Star faint and bisection doubtful. This is probably B. xi. 637, the reduced declination of which in Weisse is 1' too great. (n) Bad definition. (o) Very faint. (p) 'Another south-follows.' The following star is B. ix. 304. (q) Unsteady.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle Reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	o	o	o	
Apr. 1	(a) Polaris SP. R.	1. 19,8	15,0	17,0	13,2	11,9	14,4	13,259		308. 20. 11,91	30,116	41,2	34,8	- 1. 30. 52,62	B.
	Polaris SP.	0. 58,2	51,1	53,2	49,0	49,9	50,2			49. 45. 51,66				- 1. 30. 50,15	B.
Apr. 2	(b) Procyon R.	3. 32,8	29,2	28,9	27,4	29,0	28,3	11,559		222. 28. 1,47	30,042	46,9	45,9	84. 23. 9,71	B.
	Procyon.	2. 63,2	57,8	61,3	55,4	58,6	56,2			135. 37. 58,90				84. 23. 8,98	B.
	21 Cancri.	3. 34,0	28,6	32,6	27,2	28,7	27,8	12,821	+2	130. 7. 36,41	30,046	46,3	43,5	78. 52. 35,84	B.
	(c) B.A.C. 2822.	2. 10,9	6,8	9,0	5,5	7,2	5,0	12,821		133. 11. 14,25				81. 56. 19,52	B.
	B. VIII. 644.	2. 49,4	44,3	47,1	43,1	44,1	42,8		+1½	129. 27. 45,34				78. 12. 43,58	B.
	(d) * R. 8 ^h . 29 ^m . 49 ^s ...	1. 62,0	54,9	59,9	55,1	56,2	54,1		+3	127. 46. 57,45				76. 31. 52,76	B.
	B.A.C. 3017.	3. 28,7	23,6	25,0	22,9	22,2	22,8	12,739		120. 42. 31,79		45,9	42,4	69. 27. 16,20	B.
	* R. 8 ^h . 45 ^m . 8 ^s ...	1. 42,8	37,2	39,0	34,9	36,9	34,6		+3	120. 26. 38,16				69. 11. 22,19	B.
	B. IX. 176.	0. 24,9	20,8	23,0	19,3	21,6	18,1			145. 0. 21,30				93. 45. 56,88	B.
	B. IX. 298.	2. 62,9	60,2	63,6	57,8	60,1	57,9			143. 23. 0,57		45,6	41,4	92. 8. 31,20	B.
	B. IX. 627.	2. 51,2	45,1	49,0	43,9	46,2	44,9			136. 2. 46,85				84. 47. 58,43	B.
	2 Sextantis.	4. 23,6	18,1	21,2	15,9	17,1	18,3		+2	135. 54. 19,31				84. 39. 30,58	B.
	B. IX. 929.	4. 57,9	51,3	56,9	50,9	52,0	52,9			126. 24. 53,90	30,038	44,9	40,4	75. 9. 47,21	B.
	λ Ursæ Majoris R.	2. 48,2	44,9	44,4	43,9	42,7	44,0	14,330		260. 31. 19,06				46. 18. 58,73	B.
	λ Ursæ Majoris...	4. 45,7	39,3	42,8	37,6	37,9	39,0		+1½	97. 34. 40,95				46. 18. 57,64	B.
	B.A.C. 4254.	2. 30,1	25,9	28,9	23,1	25,9	25,0			138. 32. 26,60	30,012	42,2	36,6	87. 17. 44,64	B.
	ε Ursæ Majoris R.	4. 24,7	21,9	21,1	18,8	16,2	19,1	14,119		273. 37. 59,16	30,004	42,1	37,0	33. 12. 4,85	B.
	ε Ursæ Majoris...	2. 67,5	62,0	65,1	59,9	60,1	59,9		+1	84. 28. 2,80				33. 12. 5,71	B.
	* R. 13 ^h . 10 ^m . 1 ^s ...	4. 56,1	49,0	53,8	47,0	48,2	49,0		+1	82. 14. 51,02	30,002	42,4	37,9	30. 58. 51,59	B.
Apr. 3	21 Cancri.	2. 40,5	39,1	39,1	35,9	38,6	34,5			130. 7. 38,08	29,852	49,3	52,4	78. 52. 36,25	B.
	B. VIII. 644.	4. 26,8	24,9	25,2	22,0	25,0	21,0	14,836		129. 27. 48,06				78. 12. 45,07	B.
	B.A.C. 2872.	3. 21,9	17,9	19,1	16,2	18,1	13,9			127. 28. 18,02				76. 13. 11,66	B.
	(f) H. C. 17139.	0. 22,6	19,0	20,7	17,6	20,0	14,5			124. 15. 19,07				73. 0. 7,64	B.
	B.A.C. 3017.	3. 26,9	22,1	23,9	21,9	24,8	20,6	12,739		120. 42. 30,94		49,0	51,5	69. 27. 14,44	B.
	* R. 8 ^h . 45 ^m . 8 ^s ...	1. 44,1	39,9	40,1	37,9	40,9	36,0		+2	120. 26. 40,13				69. 11. 23,26	B.
	B. IX. 176.	0. 27,1	25,1	25,1	24,2	26,2	21,8			145. 0. 24,93			50,6	93. 45. 58,49	B.
	B. IX. 298.	2. 64,7	63,5	64,6	60,2	63,0	59,8			143. 23. 2,78				92. 8. 31,33	B.
	B. IX. 627.	4. 22,9	19,6	20,1	17,6	19,8	17,0	14,512		136. 2. 50,17				84. 48. 0,15	B.
	2 Sextantis.	4. 24,0	21,0	21,0	17,8	20,1	18,0			135. 54. 20,53	29,806	48,9	50,0	84. 39. 30,18	B.
	B. IX. 929.	1. 24,0	21,9	21,4	20,1	22,1	18,9	14,271		126. 24. 56,95				75. 9. 49,03	B.
	(g) H. C. 19371.	2. 34,9	30,3	31,9	28,7	31,6	27,9			125. 47. 31,02				74. 32. 22,11	B.
	Regulus R.	4. 22,2	18,9	17,9	18,1	16,9	19,0	11,054		229. 34. 1,59	29,860	48,8	47,5	77. 16. 55,41	B.
	Regulus.	1. 61,2	57,1	58,3	55,1	57,1	53,8			128. 31. 57,20				77. 16. 53,10	B.
	α Ursæ Majoris R.	1. 30,1	26,8	25,1	26,9	23,9	25,8	14,180	+2	279. 25. 3,29		48,2	46,5	27. 24. 54,81	B.
	α Ursæ Majoris...	0. 60,1	54,1	56,8	53,2	55,1	51,9		+3	78. 40. 57,87				27. 24. 54,87	B.
	Piazzi XI. 27.	0. 68,3	62,2	64,8	61,9	62,9	59,8			98. 6. 3,37				46. 50. 20,44	B.
	(h) χ Ursæ Majoris R.	4. 22,8	19,5	20,0	18,0	17,9	19,8	13,031		265. 28. 21,21	29,864	48,0	44,6	41. 21. 51,30	B.
	χ Ursæ Majoris...	2. 45,0	38,0	40,3	37,1	38,9	37,5		+1	92. 37. 39,77				41. 21. 51,18	B.
	Piazzi XI. 181.	2. 67,8	60,3	63,9	61,1	61,0	59,9			91. 28. 2,48				40. 12. 12,69	B.
	(i) * R. 11 ^h . 52 ^m . 28 ^s ...	4. 19,9	12,4	16,0	11,9	12,2	11,8			90. 49. 14,25				39. 33. 23,80	B.
Apr. 4	B. VIII. 228.	3. 34,8	31,7	33,0	29,0	33,7	29,1		+1	136. 33. 32,08	29,968	49,8	46,9	85. 18. 43,91	B.
	B. VIII. 466.	3. 52,9	50,6	50,5	47,2	50,9	47,0			138. 38. 50,03				87. 24. 6,74	B.
	A' Cancri.	1. 24,0	18,4	21,0	17,7	18,8	15,8			128. 1. 17,68				76. 46. 13,16	B.
	Σ 1332. sp.	2. 39,9	32,9	35,7	30,8	31,9	30,0			116. 57. 33,67	30,000	45,8	38,9	65. 42. 13,09	B.
Apr. 5	(h) α Persei R.	4. 35,0	30,7	31,3	30,4	27,3	30,7	12,974		266. 8. 33,64	29,988	47,6	54,9	40. 41. 38,13	B.
	α Persei.	2. 33,0	27,5	30,2	26,9	27,0	25,1		+1¼	91. 57. 28,69				40. 41. 39,36	B.
	Sirius R.	3. 32,1	30,1	28,6	29,9	29,2	27,1	14,921		200. 21. 51,60	29,976	49,5	49,5	106. 30. 46,03	B.
	Sirius.	4. 10,2	7,0	10,1	6,9	7,9	4,9			157. 44. 8,03				106. 30. 44,56	B.
	(k) Σ 1324.	1. 51,9	44,8	48,2	44,8	43,8	43,1			114. 26. 46,18	29,986	44,3	38,6	63. 11. 22,32	B.
	α Hydræ R.	3. 39,5	34,9	34,1	33,8	33,2	33,7	14,330		208. 52. 9,29				97. 59. 43,62	B.
	α Hydræ.	3. 54,9	49,9	52,3	48,5	49,5	48,3		+2	149. 13. 50,66				97. 59. 42,47	B.
	Σ 1397.	3. 22,7	15,9	19,5	16,3	14,2	14,9			115. 28. 17,42	29,988	42,8	36,9	64. 12. 54,99	B.
	Σ ₂ 213.	4. 22,8	16,1	21,1	16,0	15,0	16,0		+1	113. 4. 18,13		42,4	36,1	61. 48. 52,67	B.
	(l) α Ursæ Majoris R.	1. 45,6	41,0	41,8	41,3	38,1	40,2	14,704	+1	279. 25. 7,76		41,2	34,7	27. 24. 50,03	B.
	α Ursæ Majoris...	0. 64,0	57,0	60,2	56,1	57,4	54,9		+2	78. 40. 59,48				27. 24. 56,17	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10', 180, 10', 198, 10', 217, 10', 226, 10', 245 at the five wires.
 ONE REVOLUTION = 20'', 850. CORRECTION for RUNS = + 1'', 5. ZENITH POINT = 89°. 3'. 0'', 55. ASSUMED CO-LATITUDE = 37°. 47'. 8'', 28.

(a) Difficult to bisect, so unsteady and badly defined. Times by M, 13^h. 5^m. 39^s and 13^h. 7^m. 8^s. M fast on H, 2^m. 30^s. (b) Indefinite. (c) Supposed to be taken on the micrometer wire. (d) Doubtful from faintness. (e) Bad night for observations. (f) The preceding and brighter of two. (g) The north-following and brighter of two. (h) Great unsteadiness. (i) No star near this. (k) Bisection doubtful, the object being very faint. (l) Very indefinite: the mercury is not clear.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Apr. 7	(a) Sirius R.....	2. 29,4	25,7	25,8	24,1	23,3	24,0	11,751		200. 21. 53,26	29,788	45,8	46,0	106. 30. 44,84	B.
	Sirius.....	4. 11,9	6,9	12,0	6,2	9,2	6,4		+1	157. 44. 8,84				106. 30. 45,18	B.
	B.A.C. 4255.....	0. 59,8	55,9	58,6	54,9	55,1	53,9			144. 45. 56,38	29,698	46,2	36,2	93. 31. 30,96	B.
	B. XIII 113.....	3. 43,5	37,1	41,2	35,0	37,8	37,8		+1	148. 28. 38,81	29,636	40,7	35,9	97. 14. 26,59	B.
	B.A.C. 4591.....	0. 13,1	6,0	12,0	6,1	8,2	5,8			150. 10. 8,53	29,660	40,3	35,7	98. 56. 3,52	B.
Apr. 8	η Hydræ.....	2. 63,6	59,9	62,0	58,2	60,5	57,8			137. 18. 0,42	29,358	45,7	44,0	86. 3. 12,66	B.
Apr. 14	Σ 3121.....	1. 61,3	56,7	61,1	54,0	56,2	54,3		+1	112. 1. 57,42	29,408	44,1	42,1	60. 46. 30,55	B.
Apr. 16	k Virginis.....	3. 13,2	9,1	12,5	7,0	8,1	8,1			144. 13. 9,77	30,252	42,0	39,5	92. 58. 44,61	B.
	α Comæ.....	4. 28,9	21,0	25,4	18,8	20,0	21,2			122. 54. 22,68				71. 39. 11,52	B.
	(b) Spica R.....	0. 32,9	27,1	27,6	25,2	26,2	27,0	9,625		206. 30. 39,95		41,3	39,3	100. 21. 23,72	B.
	Spica.....	0. 18,8	11,9	17,1	10,9	12,8	12,8			151. 35. 14,05				100. 21. 18,00	B.
	η Ursæ Majoris R.	1. 16,8	12,1	12,9	11,2	9,0	11,7	12,749		266. 55. 19,43	30,254	41,1	38,9	39. 54. 50,95	B.
	ϵ Ursæ Majoris...	0. 46,6	40,1	43,9	39,6	40,2	39,0			91. 10. 41,58				39. 54. 52,24	B.
	(c) α Draconis R....	3. 29,9	24,7	26,1	23,8	21,9	25,4	14,732		281. 56. 51,17		41,0	38,6	24. 53. 3,14	B.
	α Draconis.....	4. 16,1	10,8	14,8	9,2	10,1	10,9		+1	76. 9. 12,44				24. 53. 7,03	B.
Apr. 19	10 Virginis.....	3. 57,2	52,1	55,9	50,9	53,1	52,0			138. 28. 53,33	30,012	41,8	38,6	87. 14. 11,76	B.
	Σ 1619. <i>sf</i>	3. 11,3	5,8	11,2	4,5	8,0	6,7			147. 38. 7,77				96. 23. 54,12	B.
	c Virginis.....	4. 33,0	27,1	30,6	25,0	27,2	27,9			137. 4. 28,23				85. 49. 43,29	B.
	B.A.C. 4255.....	0. 58,9	53,1	57,0	52,9	54,0	52,5			144. 45. 54,68		41,3	38,1	93. 31. 30,99	B.
	ϵ Ursæ Majoris R.	4. 23,6	18,9	20,9	18,7	16,0	19,0	13,795		273. 38. 4,34	30,010	41,4	37,9	33. 11. 58,85	B.
	ϵ Ursæ Majoris...	2. 62,7	55,8	60,1	55,0	55,6	55,9			84. 27. 57,37				33. 12. 1,12	B.
	k Virginis.....	3. 14,8	9,0	13,5	8,9	9,0	9,9			144. 13. 10,68				92. 53. 45,26	B.
	τ Virginis.....	2. 8,8	3,6	7,2	2,9	3,1	3,9			138. 57. 4,82		40,8	37,4	87. 42. 24,59	B.
Apr. 21	44 Leonis.....	0. 63,7	58,1	61,3	57,7	59,2	58,0			131. 40. 59,62	29,978	47,8	44,6	80. 26. 2,54	B.
	48 Leonis.....	0. 15,1	9,0	11,6	9,0	11,2	9,1		+1½	133. 30. 10,87				82. 15. 17,35	B.
	(d) 40 Sextantis. <i>s</i> ...	2. 11,9	5,9	9,1	4,9	7,6	6,2			144. 27. 7,50		46,8	43,7	93. 12. 41,69	B.
	Σ 1507.....	2. 56,1	50,1	53,1	50,0	51,9	51,2			133. 22. 51,92	29,980	46,3	42,9	82. 7. 58,36	B.
	B.A.C. 3831.....	1. 58,3	51,7	54,0	51,0	50,8	50,9			120. 16. 52,68				69. 1. 37,19	B.
	ξ Ursæ Majoris. <i>np</i> .	1. 43,5	35,8	38,9	35,8	35,0	36,1			108. 51. 37,43				57. 36. 7,35	B.
	(e) χ Ursæ Majoris R.	4. 29,9	24,7	26,8	24,7	23,0	27,6	12,930		265. 28. 28,97	29,978	45,4	42,6	41. 21. 42,74	B.
	χ Ursæ Majoris...	2. 41,8	34,7	37,0	33,4	33,9	35,0			92. 37. 35,83				41. 21. 48,10	B.
Apr. 22	(f) Capella R.....	1. 43,4	40,6	39,0	40,9	38,5	40,2	14,159		262. 40. 17,80	29,916	51,5	64,3	44. 9. 56,53	B.
	Capella.....	0. 47,1	42,1	43,4	40,7	43,9	39,7			95. 25. 42,78				44. 9. 57,67	B.
	e Leonis.....	3. 48,1	45,7	47,7	44,0	46,7	44,9			143. 23. 46,00	29,906	50,8	47,9	92. 9. 16,01	B.
	10 Virginis.....	3. 57,8	52,0	54,2	51,6	54,0	52,4		+1	138. 28. 53,48	29,904	49,6	45,7	87. 14. 10,64	B.
	γ Corvi.....	4. 35,2	29,8	33,0	29,2	33,0	32,2			157. 54. 31,83				106. 41. 11,33	B.
	c Virginis.....	4. 33,2	27,8	29,5	27,0	28,1	29,0			137. 4. 28,87				85. 49. 42,73	B.
	B. XIII. 113.	3. 42,0	36,0	39,1	35,1	38,1	37,5			148. 28. 37,78		47,5	42,5	97. 14. 26,24	B.
Apr. 23	λ Ursæ Majoris R.	2. 24,8	19,4	18,9	21,3	19,0	21,0	13,028		260. 31. 21,65	29,720	53,3	52,5	46. 18. 54,99	B.
	λ Ursæ Majoris...	4. 43,0	36,6	40,9	36,9	38,2	36,9			97. 34. 38,52				46. 18. 55,72	B.
	48 Leonis.....	0. 16,1	12,9	12,9	11,9	13,5	10,2		+2	133. 30. 12,98		52,9	51,5	82. 15. 18,16	B.
	B. XIII. 638.....	2. 40,1	33,9	36,5	32,2	34,7	33,9			149. 47. 35,08	29,682	46,8	42,4	98. 33. 28,20	B.
	τ Virginis R.....	3. 32,0	25,3	26,8	25,8	26,1	27,7	84,479		219. 8. 54,91	29,690	46,6	41,6	87. 42. 22,93	B.
	τ Virginis.....	2. 10,0	5,1	7,2	4,0	5,0	5,1		+2½	138. 57. 6,01				87. 42. 24,41	B.
	Arcturus R.....	0. 42,8	37,1	35,8	35,1	37,1	37,1	11,802		236. 50. 4,07				70. 0. 41,03	B.
	Arcturus.....	0. 60,7	54,2	56,0	54,9	54,8	53,0		+1	121. 15. 55,60				70. 0. 41,26	B.
	2 Libræ.....	4. 23,9	17,0	21,8	16,9	17,8	18,1			152. 14. 19,03	29,676	46,2		101. 0. 23,57	B.
	106 Virginis.....	1. 37,8	31,2	34,8	31,1	34,0	32,8		+1½	147. 26. 33,49				96. 12. 17,43	B.
Apr. 24	γ Corvi.....	4. 38,2	33,8	36,9	33,0	36,1	34,1			157. 54. 35,12	29,700	52,3	49,8	106. 41. 12,33	B.
	H. C. 23132.....	4. 9,1	4,1	6,2	3,5	3,1	1,8		+2	115. 24. 4,72				64. 8. 41,97	B.
	B.A.C. 4218.....	0. 49,2	43,9	44,9	43,9	44,9	42,1		+3	130. 40. 45,03		52,1	49,4	79. 25. 45,08	B.
	B.A.C. 4254.....	2. 34,0	30,1	30,1	27,8	29,9	28,0		+3	138. 32. 29,91				87. 17. 46,23	B.
	(g) Polaris SP. R....	1. 33,0	25,0	26,2	24,9	24,1	25,8	13,359		308. 20. 21,46	29,702	51,2	47,6	- 1. 31. 1,04	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10', 170, 10', 188, 10', 207, 10', 216, 10', 235 at the five wires.
 From April 14 = 10', 174, 10', 194, 10', 213, 10', 230, 10', 246. From April 19 = 10', 161, 10', 181, 10', 200, 10', 217, 10', 233.
 ONE REVOLUTION = 20", 850. CORRECTION for RUNS = + 0", 8. From April 14 = + 0", 9. From April 19 = - 1", 5. ZENITH POINT = 89°. 3'. 0". 88. From April 14 = 89°. 2'. 59", 86. From April 19 = 89°. 2'. 59", 72. ASSUMED CO-LATITUDE = 37°. 47'. 8". 28.

(a) Badly defined and faint, the surface of the mercury not being bright.
 unsteady. (d) The other star appeared to be vertically above this.

(b) Faint from cloud and without definition.
 (e) Very faint from clouds. (f) Bad definition.

(c) Indefinite and
 (g) Times by M,

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Apr. 24	Polaris SP.....	0.48,0	41,3	41,9	40,0	41,9	41,1			49.45.40,87	29,702	51,2	47,6	-1.30.58,15	B.
	B.A.C. 4591.....	0.15,2	9,9	12,9	10,0	11,9	9,9			150.10.11,62	29,704	50,9	48,0	98.56.5,21	B.
	(a)* \mathcal{R} . 14 ^h . 11 ^m . 0 ^s ..	1.20,1	12,2	16,1	13,1	15,0	13,0			83.51.14,85			48,6	32.35.18,13	B.
	(b) δ Bootis R.....	1.29,9	23,8	23,9	24,1	22,9	24,9	12,355		265.5.39,92	29,702			41.44.32,09	B.
	(i) Bootis.....	0.27,8	19,0	22,0	21,2	19,1	18,8			93.0.21,30				41.44.33,87	B.
	(b) β Coronæ Bor. R..	4.28,5	22,8	24,3	23,9	22,1	22,9	11,408	+1	246.28.58,94		49,2		60.21.33,16	B.
Apr. 26	(b) β Coronæ Borealis	1.67,0	60,1	62,2	59,2	60,9	58,1		+2½	111.37.1,69				60.21.34,35	B.
	ϵ Leonis.....	3.50,1	46,8	49,2	44,9	47,9	45,9			143.23.47,30	29,498	52,0	48,1	92.9.16,04	B.
	(c) χ Ursæ Majoris R.	4.30,0	25,6	26,6	26,0	22,9	27,1	13,090		265.28.25,90				41.21.45,84	B.
	χ Ursæ Majoris ..	2.40,9	33,9	34,9	33,6	33,0	33,8		+1	92.37.35,07				41.21.47,11	B.
	(d) η Ursæ Majoris R.	1.37,7	31,1	31,9	33,1	28,1	31,5	13,640		266.55.20,43	29,704	54,8	52,9	39.54.49,84	B.
	η Ursæ Majoris...	0.43,2	35,9	37,8	37,2	36,1	34,9			91.10.37,48				39.54.48,05	B.
May 2	α Comæ.....	4.26,2	18,9	22,0	18,4	18,1	18,0			122.54.20,35	29,856	53,7	47,6	71.39.6,43	B.
	(e)* \mathcal{R} . 13 ^h . 10 ^m . 22 ^s ..	3.17,9	11,1	13,1	10,2	9,8	8,9	9,390		123.8.29,00				71.53.15,44	B.
	(f) η Ursæ Majoris R.	1.27,9	22,5	22,8	23,1	19,0	22,0	13,069		266.55.23,31		51,9	46,9	39.54.48,56	B.
	η Ursæ Majoris...	0.43,1	34,9	37,9	35,8	34,4	34,3		+1½	91.10.37,03				39.54.46,06	B.
	(f) δ Libræ.....	4.25,0	18,0	22,0	17,8	17,1	18,3		+2	152.14.19,66	29,860	51,0	46,0	101.0.22,14	B.
	(g) ϵ Bootis R.....	4.29,1	21,9	23,1	22,0	20,4	23,5	10,489		244.34.17,60	29,858	50,7	45,3	62.16.18,86	B.
May 3	ϵ Bootis.....	1.49,8	42,0	44,0	41,8	39,7	41,1			113.31.43,10				62.16.16,72	B.
	(h) ϵ Leonis.....	3.48,4	43,8	46,9	42,8	43,9	43,0		+1½	143.23.44,85	29,774	52,4	46,9	92.9.12,97	B.
	(i) Σ 1634.....	4.26,1	18,1	21,5	18,7	16,6	17,9	11,180		117.28.59,67	29,778	51,3	47,5	66.13.33,12	B.
	(k) H. C. 23136.....	2.29,9	22,4	25,0	23,1	19,9	22,0			115.22.23,77				64.6.59,50	B.
	Σ 1733.....	0.55,1	46,8	49,2	46,7	45,7	44,8			123.10.48,07	29,786	50,2	47,2	71.55.34,50	B.
	* \mathcal{R} . 13 ^h . 10 ^m . 22 ^s..	...	...	...	...	...	...	16,819		123.8.30,27				71.53.16,65	B.
May 5	B. XIII. 638.....	2.29,8	23,0	25,3	22,1	23,4	22,1	9,619		149.47.36,66	29,790		46,5	98.33.27,57	B.
	η Ursæ Majoris R.	1.28,4	22,3	22,9	23,2	19,1	21,2	13,019		266.55.24,31				39.54.47,56	B.
	η Ursæ Majoris...	0.43,1	34,1	37,9	36,8	33,9	34,7			91.10.36,77				39.54.45,80	B.
	(l) Arcturus R.....	0.43,7	37,9	36,0	37,0	36,1	36,8	11,804		236.50.4,74	29,788	50,0	46,1	70.0.41,84	B.
	Arcturus.....	0.60,9	54,8	55,8	54,8	53,0	51,0			121.15.55,07				70.0.38,81	B.
	(m) Σ 1507.....	2.57,8	50,3	54,5	50,1	50,9	50,3			133.22.52,37	29,780	48,1	41,0	82.7.56,95	B.
May 9	(n) Σ 1558.....	0.53,9	45,0	48,1	44,9	43,0	43,5			118.55.46,42	29,776	46,5	39,9	67.40.27,33	B.
	(o)* \mathcal{R} . 11 ^h . 38 ^m . 50 ^s ..	0.48,9	39,1	41,9	39,9	39,1	40,0		+3	134.30.41,66				83.15.48,69	B.
	\circ Virginis R.....	1.23,9	17,3	19,0	17,5	17,0	17,0	9,740		226.26.28,45	29,772	45,9	39,2	80.24.35,80	B.
	\circ Virginis.....	4.40,0	31,1	35,1	31,7	30,2	32,8		+1½	131.39.33,63				80.24.35,04	B.
	(p) δ Ursæ Majoris...	3.67,0	59,8	63,9	61,8	58,1	57,9	11,220		274.43.40,44				32.6.23,36	B.
	δ Ursæ Majoris...	2.51,9	22,2	25,8	22,9	22,0	22,3			83.22.24,57				32.6.25,53	B.
May 14	(p) δ Corvi R.....	3.32,9	24,9	28,0	25,1	24,2	24,9	11,098		201.13.8,21	29,776	45,2	38,6	105.39.26,37	B.
	(p) δ Corvi.....	2.59,8	51,1	56,2	51,0	51,9	52,0			156.52.53,73				105.39.25,47	B.
	Σ 1604.....	3.34,9	30,6	32,1	29,5	29,7	29,9		+2	152.13.30,96	29,438	48,0	44,6	100.59.32,89	B.
	(g) δ Corvi R.....	3.34,9	30,1	30,1	29,1	29,0	30,0	11,456		201.13.4,46	29,450	47,9	44,7	105.39.25,90	B.
	δ Corvi.....	2.64,2	57,5	59,0	56,2	58,2	56,9			156.52.58,63				105.39.27,79	B.
	Σ 1678. <i>nf</i>	1.63,8	57,9	61,1	57,5	57,6	57,0		+2¾	126.1.59,43	29,444	47,6	44,0	74.46.50,86	B.
May 17	ϵ Ursæ Majoris R.	4.28,9	24,9	25,3	24,9	22,7	24,4	13,719		273.38.11,90				33.11.52,32	B.
	ϵ Ursæ Majoris...	2.57,4	50,9	53,9	51,1	50,1	49,9		+1¼	84.27.52,54				33.11.55,56	B.
	Polaris SP. R....	1.35,1	28,9	30,0	29,1	26,9	29,0	13,298		308.20.25,87		47,2	43,3	-1.31.4,58	B.
	Polaris SP.....	0.46,2	40,1	39,0	39,1	39,0	39,1			49.45.38,30				-1.31.1,61	B.
	Arcturus R.....	0.32,7	27,1	25,1	26,9	26,2	26,1	11,200		236.50.6,64	29,438	45,9	41,0	70.0.39,07	B.
	Arcturus.....	0.59,8	52,0	55,0	53,1	53,1	52,0			121.15.54,15				70.0.38,66	B.
May 14	(s) B.A.C. 4218.....	0.45,9	40,1	42,1	40,9	42,0	40,0			130.40.41,83	30,262	49,8	46,3	79.25.42,30	B.
	Σ 1678. <i>nf</i>	1.62,5	56,9	59,8	56,1	56,5	55,7			126.1.57,90				74.46.50,32	B.
	Σ 1699.....	1.36,1	28,9	31,0	28,9	28,9	28,1		+1	112.56.30,38		48,1	45,6	61.41.4,43	B.
May 17	(t) Σ 1727.....	3.53,1	45,9	48,1	45,0	45,1	45,1		+2¾	109.3.47,74				57.48.16,75	B.
	H. C. 23132.....	3.65,1	57,9	61,2	58,9	56,7	57,2		+4¼	115.24.0,54	30,098	48,6	41,6	64.8.37,07	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10', 161, 10', 181, 10', 200, 10', 217, 10', 233 at the five wires. From April 26 = 10', 160, 10', 180, 10', 199, 10', 216, 10', 232. From May 2 = 10', 171, 10', 191, 10', 210, 10', 227, 10', 243. From May 9 = 10', 168, 10', 188, 10', 207, 10', 224, 10', 240. From May 17 = 10', 165, 10', 185, 10', 204, 10', 221, 10', 237. ONE REVOLUTION = 20'', 850. CORRECTION for RUNS = -1'', 5. From April 26 = -1'', 3. From May 2 = +0'', 6. From May 9 = -0'', 3. From May 17 = -2'', 0. ZENITH POINT = 89°, 2', 59'', 72. From April 26 = 89°. 2'. 59'', 85. From May 2 = 89°. 3'. 1'', 42. From May 9 = 89°. 3'. 0'', 60. From May 17 = 89°. 3'. 1'', 32. ASSUMED CO-LATITUDE = 37°. 47'. 8'', 28.

(a) The second of three. (b) Very faint from clouds. (c) Frequently obscured. (d) Not good: clouds passing and the wind too strong. (e) This star is most probably the same as Bessel Z. 341. 13^h. 8^m. 47^s. (f) Unsteadiness. (g) Bad night for definition. (h) Clouds. (i) Not perceived to be double. (k) Mistaken for H. C. 23132, which follows 20. (l) Very indefinite, the mercury being bad. (m) Faint from day-light. (n) The following of two very faint stars. (o) Bisection doubtful on account of the faintness of the object. (p) Unsteadiness and bad definition. (q) Faint from haze. (r) The shutter intercepting. Times by M, 13^h. 8^m. 35^s and 13^h. 11^m. 50^s. M fast on 11, 3^m. 7^s. (s) Very faint from haze. No other star was seen. (t) Doubtful observation, the star being very faint.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.		Observer.
		A	B	C	D	E	F					Int.	Ext.	° ' "	° ' "	
		"	"	"	"	"	"					r.	Inch.			
May 17	* α R. 13 ^h . 10 ^m . 22 ^s .	0.53,0	43,9	47,0	43,9	43,0	42,8	16,755	+1 $\frac{1}{2}$	123. 8. 29,67	30,086	45,5	41,9	71. 53. 16,98		B.
	(a) η Ursæ Majoris R.	1.54,8	48,1	49,9	49,2	46,0	47,9	14,060		266. 55. 28,80	30,088	46,1	42,0	39. 54. 43,01		B.
	η Ursæ Majoris...	0.40,1	32,9	35,1	32,9	32,4	32,0		+1	91. 10. 34,38				39. 54. 43,55		B.
	(b) * α R. 14 ^h . 11 ^m . 0 ^s ..	1.16,1	7,2	11,9	8,7	8,1	8,0			83. 51. 9,93	30,086	45,9	40,9	32. 35. 11,44		B.
	θ Bootis.....	1.53,1	44,3	48,1	45,8	43,9	45,6			88. 41. 46,68				37. 25. 53,27		B.
	Σ 1870.....	2.31,0	24,6	27,1	25,1	23,6	24,9	15,069		132. 30. 44,45	30,082		39,9	81. 15. 48,10		B.
	α^2 Libræ R.....	3.27,7	21,5	23,9	20,3	20,1	21,0	9,205		201. 28. 43,02				105. 23. 50,70		B.
	α^2 Libræ.....	2.22,2	15,8	19,1	15,0	15,2	15,9			156. 37. 17,05				105. 23. 48,13		B.
	(c) β Libræ R.....	3.27,7	21,1	22,8	20,8	20,9	21,2			208. 3. 22,18	30,072	44,4	39,3	98. 48. 35,13		B.
	β Libræ.....	2.42,2	35,9	39,0	35,9	36,9	36,9			150. 2. 37,63				98. 48. 32,30		B.
	(d) μ Bootis.....	0.24,4	16,1	18,9	16,2	14,1	14,4			103. 20. 17,33				52. 4. 39,55		B.
	(e) Σ 1950.....	2.58,0	50,8	53,9	49,9	48,9	49,9			115. 12. 51,72		44,3		63. 57. 28,12		B.
	(f) Σ 1973. sf.....	4.69,2	59,4	63,9	61,0	58,4	58,7			104. 20. 1,77	30,074	43,8	39,1	53. 4. 25,12		B.
	θ Draconis R.....	4.25,1	19,8	20,9	19,5	15,4	19,8	11,622		275. 48. 50,23	30,068	43,7	39,4	31. 1. 12,26		B.
	θ Draconis.....	2.19,4	10,1	15,2	10,9	9,8	10,3		+1 $\frac{1}{2}$	82. 17. 13,03				31. 1. 12,83		B.
May 22	(g) ϵ Ursæ Majoris R.	4.28,1	23,1	23,1	22,1	20,0	22,9	89,200	+ $\frac{1}{2}$	273. 38. 12,46	29,730	48,1	44,7	33. 11. 52,44		B.
	ϵ Ursæ Majoris....	2.52,9	49,1	49,9	47,1	48,1	45,7		+2	84. 27. 49,54				33. 11. 51,80		B.
	Σ 1733.....	0.52,1	45,1	46,9	43,7	44,0	42,4			123. 10. 45,65		47,8	44,3	71. 55. 32,34		B.
	* α R. 14 ^h . 11 ^m . 0 ^s ..	1.13,6	6,1	10,1	7,1	7,1	6,1			83. 51. 8,28	29,738	46,1	43,3	32. 35. 9,89		B.
	θ Bootis.....	1.50,9	41,1	45,9	43,0	41,9	43,0			88. 41. 44,18				37. 25. 50,78		B.
	Piazzi XIV. 126..	1.30,8	22,2	25,3	22,0	21,9	23,7			80. 21. 24,22		45,6	42,9	29. 5. 22,18		B.
	ϵ Bootis R.....	4.32,1	26,0	27,2	25,9	26,1	28,0	10,545		244. 34. 20,14				62. 16. 16,23		B.
	ϵ Bootis.....	1.46,1	37,1	41,1	37,9	37,0	38,1		+1 $\frac{3}{4}$	113. 31. 39,69				62. 16. 13,42		B.
	* α R. 14 ^h . 44 ^m . 0 ^s ..	3.34,0	24,8	28,2	25,8	25,4	26,2			79. 3. 27,17		45,7	42,4	27. 47. 23,75		B.
	δ Libræ.....	3.24,0	18,1	22,6	16,0	19,0	17,9			149. 8. 19,38				97. 54. 8,36		B.
	β Libræ R.....	2.28,9	22,1	22,4	21,6	22,0	21,5	7,392		208. 3. 21,55	29,736	44,9	41,9	98. 48. 33,98		B.
	β Libræ.....	2.44,1	38,4	41,1	37,0	39,6	38,0		+1 $\frac{1}{2}$	150. 2. 39,48				98. 48. 32,37		B.
	Σ 1950.....	2.56,0	48,0	51,9	48,4	47,8	48,1			115. 12. 49,85				63. 57. 25,77		B.
	α Serpentis R.....	1.29,1	22,7	24,1	22,5	22,6	22,8	11,040		223. 46. 6,43	29,734	44,6	41,5	83. 5. 2,68		B.
	α Serpentis.....	4.62,2	55,0	59,0	54,0	56,0	56,0			134. 19. 56,70				83. 5. 3,17		B.
May 26	α^2 Libræ.....	3.24,9	20,1	23,0	18,7	20,7	18,9		+2 $\frac{1}{2}$	155. 48. 20,53	29,648	50,5	45,9	104. 34. 43,23		B.
	(h) α Coronæ Bor. R..	0.31,0	28,1	25,1	25,9	26,1	26,1	11,708		244. 4. 55,64				62. 45. 40,23		B.
	α Coronæ Borealis.	1. 8,5	2,0	4,9	2,6	1,0	0,4		+1 $\frac{1}{2}$	114. 1. 3,30				62. 45. 38,27		B.
	γ Coronæ Borealis.	2.67,1	62,1	64,1	60,9	60,0	59,8			114. 28. 2,07		50,3	45,6	63. 12. 37,61		B.
	γ Serpentis.....	4.59,2	53,8	57,9	53,1	55,0	53,1			125. 4. 54,93				73. 49. 45,17		B.
	θ Draconis R.....	4.22,9	20,1	19,1	18,9	16,6	18,9	11,463		275. 48. 52,78	29,650	50,1	45,1	31. 1. 9,02		B.
	θ Draconis.....	2.16,7	9,9	12,1	9,9	9,0	8,2		+1	82. 17. 11,03				31. 1. 11,93		B.
May 27	τ Virginis R.	3.26,9	23,4	19,7	19,1	21,1	21,2	8,499		219. 8. 57,15	29,802	52,5	47,6	87. 42. 20,82		B.
	τ Virginis.....	2. 8,0	4,0	4,8	2,1	4,5	1,8			138. 57. 4,02				87. 42. 21,09		B.
	Piazzi XIV. 126..	1.28,9	20,9	22,2	22,4	19,2	21,4			80. 21. 22,38	29,800	50,5	47,4	29. 5. 21,28		B.
	(c) ϵ Bootis R.....	4.26,0	19,9	20,1	18,6	20,2	21,1			244. 34. 20,62				62. 16. 14,70		B.
	ϵ Bootis.....	1.45,5	36,9	39,1	36,9	36,1	37,1		+1 $\frac{1}{2}$	113. 31. 38,65				62. 16. 13,07		B.
	ξ^2 Libræ.....	0.62,9	56,2	59,9	55,6	56,9	55,9			152. 0. 57,82	29,798	50,4	47,4	100. 46. 59,61		B.
	β Libræ R.....	2.57,8	50,1	51,1	49,0	50,1	49,1	8,800		208. 3. 20,20	29,800	50,1	47,0	98. 48. 33,58		B.
	β Libræ.....	2.45,9	39,3	41,5	37,9	40,2	39,1			150. 2. 40,42				98. 48. 33,30		B.
	(i) Σ 1935.....	4.53,9	47,1	50,8	47,2	45,9	47,2		+3	109. 59. 49,09				58. 44. 19,30		B.
	(k) Σ 1973. sf.....	4.62,9	55,1	57,7	55,9	54,9	53,9		+3	104. 19. 57,75	29,798	49,9	47,5	53. 4. 21,54		B.
	(l) γ Serpentis.....	4.60,0	53,0	57,8	52,8	53,8	53,1		+1 $\frac{1}{4}$	125. 4. 54,74				73. 49. 45,02		B.
	κ Herculis. sp.	2.30,9	23,0	26,8	23,9	23,1	23,6		+3	123. 47. 25,43	29,796	49,8	47,1	72. 32. 13,77		B.
	* α R. 16 ^h . 9 ^m . 16 ^s ..	0.15,9	9,2	11,9	9,6	9,6	10,1			79. 40. 11,03	29,790	49,7	47,0	28. 24. 9,21		B.
May 30	(h) η Ursæ Majoris R.	1.22,8	16,7	17,7	18,1	14,1	16,2	12,458		266. 55. 30,47	29,990	49,7	45,6	39. 54. 40,45		B.
	η Ursæ Majoris...	0.35,5	28,4	31,9	29,0	29,1	28,6			91. 10. 30,37				39. 54. 40,39		B.
	Arcturus R.....	0.26,9	20,1	18,9	19,0	19,1	20,7	10,731		236. 50. 9,73	29,992	48,9	45,0	70. 0. 36,21		B.
	Arcturus.....	0.55,8	48,9	50,9	50,1	48,9	47,0			121. 15. 50,20				70. 0. 35,24		B.
June 4	106 Virginis.....	3.32,1	24,1	29,2	25,1	26,0	26,0	15,659		147. 26. 32,67	29,538	53,9	47,0	96. 12. 14,28		B.
	(m) Σ 1847.....	4.45,2	37,0	44,9	38,1	39,2	38,0		+3	150. 44. 39,67				99. 30. 34,57		B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10', 165, 10', 185, 10', 204, 10', 221, 10', 237 at the five wires. From May 26 = 10', 169, 10', 181, 10', 203, 10', 220, 10', 235. From June 4 = 10', 155, 10', 167, 10', 189, 10', 206, 10', 221. ONE REVOLUTION = 20'', 850. CORRECTION for RUNS = -2'', 0. From May 26 = -2'', 6. From June 4 = -3'', 2. ZENITH POINT = 89°. 3'. 1'', 32. From May 26 = 89°. 3'. 0'', 45. From June 4 = 89°. 3'. 0'', 54. ASSUMED CO-LATITUDE = 37°. 47'. 8'', 28.

(a) Unsteadiness and bad definition. (b) The reading of A has been increased by 1'. (c) Accidentally on the fixed wire. (d) Piazzi XV. 74, which is Σ 1933, south-follows. (e) Not perceived to be double. (f) No correction for Runs. (g) Mistake of 5' in the setting. (h) Bad definition. (i) Star faint and bisection doubtful. (k) Obscured by clouds. No correction for Runs. (l) Faint from clouds. (m) The companion not seen: sky hazy.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"				Inch.	°	°		
June 4	* R. 14 ^h . 44 ^m . 0 ^s ..	3. 32,1	21,0	25,6	23,2	21,1	22,8	11,190	+ $\frac{3}{4}$	79. 3. 23,93	29,540	52,9	47,0	27. 47. 21,46	B.
	ξ ² Libræ.....	0. 62,1	54,9	59,5	54,4	56,4	53,4			152. 0. 56,68				100. 46. 57,48	B.
	(a) δ Libræ.....	3. 27,0	19,1	23,5	17,9	19,1	18,1			149. 8. 20,43				97. 54. 8,55	B.
	(b) α ² Libræ.....	3. 28,2	20,8	25,0	20,1	21,1	20,9			155. 48. 22,32	29,542	52,2	47,3	104. 34. 44,07	B.
	(c) μ Bootis.....	0. 19,9	10,1	13,1	10,3	8,1	8,0			103. 20. 11,57				52. 4. 32,82	B.
	(d) θ Draconis R....	4. 22,1	15,1	16,0	16,7	11,2	15,8			275. 48. 54,91	29,552	51,8	47,4	31. 1. 7,04	B.
	(d) θ Draconis.....	2. 14,0	4,0	8,1	5,0	2,1	2,9			82. 17. 8,05				31. 1. 8,92	B.
	(e) τ Herculis R....	1. 25,4	17,9	18,0	19,1	14,1	17,0	10,010	+1 $\frac{1}{2}$	263. 31. 22,19				43. 18. 52,23	B.
	(e) τ Herculis.....	4. 45,2	35,5	40,0	38,1	34,9	35,9			94. 34. 38,13				43. 18. 51,47	B.
June 7	48 Libræ.....	3. 32,0	26,8	28,0	24,3	26,5	25,2		+1	155. 3. 26,73	29,676	57,2	51,4	103. 49. 43,33	B.
	(f) Σ 2011.....	0. 49,6	41,0	42,7	39,9	40,7	38,1			111. 50. 42,12				60. 35. 14,10	B.
June 10	Colla's Comet SP..	1. 49,3	42,5	42,8	41,4	42,0	42,2			6. 36. 43,17	30,240	57,0	53,5	-44. 46. 4,70	C.
June 11	Colla's Comet SP..	0. 15,0	7,5	9,5	7,7	6,1	6,2			6. 5. 8,65	30,162	56,0	51,8	-45. 18. 7,60	C.
June 12	(g) Colla's Comet SP..	3. 10,3	3,0	3,2	2,0	3,2	1,8	6,223	+4 $\frac{3}{4}$	5. 19. 26,85	30,160	60,5	57,8	-46. 4. 30,13	C.
June 13	(h) * R. 16 ^h . 46 ^m . 32 ^s ..	4. 47,5	43,0	38,5	39,4	38,2	38,9			81. 29. 40,95	30,148	64,2	61,4	30. 13. 41,07	C.
	(i) Colla's Comet SP..	2. 68,2	63,0	61,3	60,4	60,6	59,3			4. 23. 1,82	30,136	62,5	58,1	-47. 2. 5,91	C.
July 1	B.A.C. 5650.....	1. 43,1	37,3	37,1	37,6	37,9	35,9	15,141	+3	166. 31. 38,05	29,542	58,8	56,9	115. 19. 54,91	B.
	(k) 58 Ophiuchi.....	0. 29,0	22,5	23,1	23,9	23,2	21,2			162. 48. 41,14	29,598	57,9	55,9	111. 36. 1,29	B.
	(k) 3 Sagittarii.....	1. 41,0	33,1	34,0	35,1	34,9	32,1			168. 56. 34,43				117. 45. 50,36	B.
July 3	(l) * R. 16 ^h . 55 ^m . 49 ^s ..	1. 62,0	56,9	56,8	56,4	56,7	54,3		+2	166. 26. 56,72	29,794	52,2	59,6	115. 15. 12,79	B.
	ξ Ophiuchi.....	4. 15,9	9,8	10,0	10,1	9,8	7,5			162. 9. 10,27	29,796	61,6	58,8	110. 56. 22,80	B.
	(k) 58 Ophiuchi.....	3. 44,7	39,0	38,1	38,0	38,1	37,0			162. 48. 38,93	29,798	60,6	57,8	111. 35. 59,60	B.
	(k) 3 Sagittarii.....	1. 39,9	33,1	32,4	33,6	33,8	36,6			168. 56. 34,62				117. 45. 51,40	B.
	4 Sagittarii.....	4. 51,0	45,8	46,9	44,1	46,1	44,0			164. 59. 46,03	29,800	60,0	56,4	113. 47. 37,96	B.
	Σ 2369.....	1. 14,1	7,8	8,2	7,1	7,1	4,1			138. 46. 8,00	29,804	58,6	55,3	87. 31. 22,78	B.
July 7	H. C. 31147.....	2. 14,8	5,6	5,9	5,5	5,0	3,0	11,252	+4 $\frac{1}{4}$	112. 57. 6,35	29,952	66,5	63,9	61. 41. 38,41	B.
	58 Ophiuchi.....	3. 48,0	41,1	40,2	40,9	42,2	39,1			162. 48. 40,34	29,962	65,4	62,4	111. 36. 0,09	B.
	α Lyræ R.....	4. 39,2	30,5	28,9	31,3	29,8	30,1			255. 29. 8,76	29,952	64,4	60,7	51. 21. 14,69	B.
	α Lyræ.....	1. 59,8	51,0	50,0	51,0	49,1	47,1			102. 36. 51,56				51. 21. 12,25	B.
	θ Draconis R....	2. 28,9	21,1	18,9	22,1	18,7	19,9			276. 2. 13,85				30. 47. 48,81	B.
	θ Draconis.....	3. 56,9	46,8	47,1	47,6	45,8	46,0			82. 3. 47,87				30. 47. 47,77	B.
July 8	B.A.C. 5650.....	1. 50,0	43,0	42,1	41,4	43,1	39,0	10,437	+3	166. 31. 42,87	29,920	63,0	57,4	115. 20. 2,55	B.
	ξ Ophiuchi.....	4. 15,9	8,6	10,0	8,7	8,5	6,0			162. 9. 9,07	29,916	61,9	56,8	110. 56. 22,93	B.
	(m) * R. 17 ^h . 46 ^m . 42 ^s ..	1. 40,9	28,8	30,1	31,0	28,5	28,0			99. 31. 32,23				48. 15. 49,78	B.
	α Lyræ R.....	4. 23,4	13,9	14,8	14,5	12,6	13,6			255. 29. 9,63	29,912	59,4	55,3	51. 21. 13,95	B.
	α Lyræ.....	1. 60,0	50,2	50,9	50,9	48,9	47,2			102. 36. 51,24				51. 21. 12,06	B.
	Σ 2400.....	4. 62,1	53,0	54,9	53,6	51,1	51,1			125. 9. 53,95				73. 54. 42,92	B.
	Σ 2445.....	1. 13,7	3,4	5,1	4,1	1,1	0,1			118. 9. 3,62				66. 53. 42,65	B.
	53 Draconis R....	1. 25,8	19,2	16,6	19,4	14,2	14,7			273. 26. 6,58	29,904	58,9	54,6	33. 23. 58,65	B.
	(n) 53 Draconis.....	4. 67,4	57,1	58,9	57,0	55,5	55,0			84. 39. 58,24				33. 24. 0,71	B.
July 14	η Serpentis R....	4. 23,5	15,1	13,6	14,0	13,9	12,1	6,069	+2	213. 55. 41,22	30,002	58,7	52,0	92. 55. 52,53	B.
	η Serpentis.....	0. 27,3	21,4	20,9	20,2	20,4	18,0			144. 10. 21,33				92. 55. 50,90	B.
	(o) Σ 2369.....	1. 12,9	4,0	5,5	4,8	3,9	1,1			138. 46. 5,33				87. 31. 20,15	B.
	Σ 2445.....	3. 70,2	59,0	62,7	60,9	58,5	57,2			118. 9. 1,15	30,004	57,4	51,8	66. 53. 39,77	B.
	(p) B.A.C. 6590.....	2. 26,5	17,1	18,1	17,0	16,4	15,4			157. 1. 18,01				105. 47. 47,21	B.
	ρ ¹ Sagittarii.....	0. 63,5	55,3	57,0	55,0	55,8	52,1			159. 20. 56,38				108. 7. 43,85	B.
	θ Cygni R.....	2. 25,8	16,3	16,7	16,5	13,1	14,1			266. 42. 22,69		56,2	50,1	40. 7. 50,07	B.
	θ Cygni.....	3. 53,2	44,1	45,1	44,1	42,0	41,9			91. 23. 44,82				40. 7. 53,40	B.
July 16	(q) i Herculis R....	1. 28,9	22,5	21,1	25,0	19,1	21,0	11,324	+1 $\frac{1}{4}$	262. 55. 59,39	29,966	57,4	52,1	43. 54. 17,21	B.
	(q) i Herculis.....	4. 69,1	61,0	61,8	62,0	59,2	57,8			95. 10. 2,06				43. 54. 14,48	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10^h. 155, 10^h. 167, 10^h. 189, 10^h. 206, 10^h. 221 at the five wires. From July 1 = 10^h. 156, 10^h. 174, 10^h. 192, 10^h. 208, 10^h. 223. From July 7 = 10^h. 148, 10^h. 166, 10^h. 184, 10^h. 200, 10^h. 215. From July 14 = 10^h. 164, 10^h. 182, 10^h. 200, 10^h. 216, 10^h. 231. ONE REVOLUTION = 20^h. 850. CORRECTION for RUNS = -3^h. 2. From July 1 = -1^h. 8. From July 7 = -4^h. 0. From July 14 = -2^h. 0. ZENITH POINT = 89^h. 3^h. 0^h. 54. From July 1 = 89^h. 3^h. 1^h. 22. From July 7 = 89^h. 3^h. 1^h. 33. From July 14 = 89^h. 3^h. 2^h. 03. ASSUMED CO-LATITUDE = 37^h. 47^h. 8^h. 23.

(a) Very faint. (b) The pointer reading has been increased by 10'. (c) 'The north-preciding of two.' (d) Faint from clouds. (e) Faint and unsteady. (f) Clouds. (g) Eye-glass misty and comet faint. It was bisected very doubtfully just as it was leaving the field. Correction applied for change of N.P.D. = +3^h. 53. (h) The brightest of a double star. Negative correction for RUNS. (i) Comet faint, but pretty good observation. (k) Unsteady. (l) The microscope readings have been diminished 1'. This star was observed with Mars on June 3, 1843, with the Northumberland Equatoreal, being mistaken for B.A.C. 5741, the R.A. of which is 1^m in defect. (m) Too faint to bear illumination: placed by guess opposite the large Indenture of the comb. (n) The microscope readings have been diminished by 1'. (o) Faint. (p) Very unsteady. (q) Obscured by cloud. No correction for RUNS in the direct observation.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle Reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.			Observer.
		A	B	C	D	E	F					Int.	Ext.				
		"	"	"	"	"	"					"	"	"	"	"	
July 16	4 Sagittarii..... 70 Ophiuchi. <i>np</i> ..	4. 47,1 2. 11,1	41,0 7,1	43,1 6,7	40,8 6,0	41,8 5,0	39,8 2,1		-2	164. 59. 41,68 138. 42. 6,20	29,966	57,4 56,6	52,1 51,6	113. 47. 36,01 87. 27. 20,83		B. B.	
July 18	(a) α Lyræ R..... α Lyræ..... Σ 2408.....	4. 42,1 1. 56,0 3. 57,8	36,2 48,9 50,9	33,0 47,6 51,0	36,1 48,1 50,1	34,0 47,0 50,1	35,1 45,2 48,2	11,317	+2	255. 29. 12,48 102. 36. 49,16 130. 38. 51,10	30,068	60,3 59,9	56,5 56,0	51. 21. 11,85 51. 21. 9,31 79. 23. 48,66		B. B. B.	
July 19	(a) Piazzì XVII. 64.. α Ophiuchi R. α Ophiuchi..... (b) 4 Sagittarii.....	0. 61,7 1. 38,0 4. 23,3 4. 49,0	53,0 30,9 15,1 41,4	55,1 28,0 16,0 44,0	54,4 30,8 14,9 41,1	53,4 29,4 14,0 41,1	51,0 29,0 12,9 41,1		+1 $\frac{1}{2}$ +1 $\frac{1}{2}$	112. 15. 54,70 229. 31. 46,58 128. 34. 15,83 164. 59. 42,48	30,038	59,7 58,9	53,0 52,3	61. 0. 25,85 77. 19. 11,84 77. 19. 10,07 113. 47. 37,44		B. B. B. B.	
July 28	(c) χ Aquilæ..... (a) Piazzì XIX. 307.. 16 Vulpeculæ..... (d) θ Sagittæ. <i>nf</i>	1. 56,2 2. 21,9 4. 45,7 2. 38,7	56,0 19,8 41,8 34,1	59,1 22,9 47,8 38,9	56,0 19,9 42,0 35,4	57,1 20,9 45,9 37,9	57,9 22,9 46,0 39,0			129. 46. 56,88 131. 17. 21,18 116. 44. 44,45 120. 47. 37,10	29,542 29,538	59,4 58,7	52,7 52,1	78. 31. 42,01 80. 2. 8,99 65. 29. 10,39 69. 32. 8,41		B. B. B. B.	
July 29	α Lyræ R..... α Lyræ..... Σ 2408..... H. C. 35690..... ρ^2 Sagittarii..... χ Aquilæ..... Σ 2577..... 32 Cygni R..... 32 Cygni..... (e) B.A.C. 7079..... η Cephei R..... η Cephei.....	4. 47,1 1. 57,0 3. 59,0 2. 34,7 3. 29,0 1. 60,1 1. 62,6 0. 24,8 1. 15,9 0. 18,0 0. 20,9 1. 40,9	43,5 52,8 55,3 28,1 26,1 55,2 57,5 20,0 9,2 14,9 17,9 36,1	47,0 58,0 61,1 35,8 31,0 62,1 63,1 25,5 17,0 20,4 21,2 42,5	44,3 55,7 57,0 31,0 26,8 57,3 58,9 22,5 13,1 16,0 19,0 38,0	46,2 56,9 58,9 32,1 29,9 57,9 60,0 27,2 12,6 18,1 18,2 38,9	49,5 56,9 61,1 34,8 31,7 60,2 62,0 27,2 15,1 20,1 23,0 42,2	11,121 <									

MICROMETER READING for COINCIDENCE with fixed Wire = 10'.164, 10'.182, 10'.200, 10'.216, 10'.231 at the five wires. From July 28 = 10'.150, 10'.169, 10'.187, 10'.200, 10'.219. From July 31 = 10'.153, 10'.172, 10'.190, 10'.203, 10'.222. ONE REVOLUTION = 20".050. CORRECTION for RUNS = -2".0. From July 28 = -2".7. From July 31 = -2".4. ZENITH POINT = 89°. 3'. 2".09. From July 26 = 89°. 3'. 12".43. From July 31 = 89°. 3'. 12".09. From Aug. 8 = 89°. 3'. 12".04. From Aug. 15 = 89°. 3'. 12".18. ASSUMED CO-LATITUDE = 37°. 47'. 0".28.

On July 26, the Circle was taken from the Pier and the pivots were cleaned: the microscopes were then adjusted.

(a) Bad definition. (b) Unsteadiness. (c) Clouds. (d) The north-following of the two brightest of three. The state of the air this night was bad for observing. (e) 'The north-following star, which appeared the brighter.' The R.A. of this star in B.A.C. is nearly 2° in defect, and the N.P.D. appears to be that of Piazzì XX. 177. (f) Faint and hazy: only one star seen. (g) 'The south-preceding star.' (h) H. C. 39686 has 5' less N.P.D. the R.A. agreeing. (i) Wires too close. (k) Faint. (l) Very faint from clouds. Times by M, 18°. 26'. 55" and 18°. 27'. 55". M fast on H, 4m. 1s.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	°		
Aug. 4	Σ 2596.....	1. 26,7	24,2	28,8	24,9	27,7	29,1	11,010		126. 21. 26,78	29,664	58,7	54,7	75. 6. 6,59	B.
	32 Cygni R.....	0. 29,5	28,1	30,1	28,3	29,9	32,9			264. 5. 12,67				42. 45. 12,68	B.
	32 Cygni.....	1. 11,9	8,4	13,5	10,7	11,0	12,6			94. 1. 11,25				42. 45. 12,42	B.
	(a) η Cephei R.....	0. 33,0	32,9	33,1	32,1	32,7	34,9			278. 4. 49,27				28. 45. 21,99	B.
	η Cephei.....	1. 38,0	35,2	39,4	35,1	37,5	40,1			80. 1. 37,42				28. 45. 24,50	B.
Aug. 6	(a) B.A.C. 6258.....	1. 60,2	55,1	61,7	56,6	60,5	60,1	9,982	+1½	90. 1. 59,29	29,752	61,6	58,5	38. 45. 56,46	B.
	α Lyræ R.....	4. 23,9	21,2	23,7	22,0	23,0	27,0			255. 29. 27,46				51. 21. 6,66	B.
	α Lyræ.....	1. 55,5	52,2	56,8	53,4	55,9	55,1			102. 36. 54,67				51. 21. 4,61	B.
Aug. 7	72 Ophiuchi.....	2. 8,5	9,2	11,9	7,8	11,9	10,7	9,942		131. 42. 9,82	29,728	60,5	56,1	80. 26. 58,70	B.
	o Draconis R.....	2. 30,9	29,6	31,3	29,3	30,1	33,6			276. 2. 35,77				30. 47. 37,57	B.
	o Draconis.....	3. 49,0	45,4	50,6	46,2	47,8	48,9			82. 3. 47,68				30. 47. 36,84	B.
	(b) ρ Sagittarii.....	3. 30,8	31,1	23,0	29,8	33,9	34,0	11,089	+½	159. 48. 30,14	29,734	58,9	55,0	108. 35. 9,13	B.
	δ Cygni R.....	1. 28,6	27,9	29,1	29,7	28,2	30,0			261. 36. 10,05				45. 14. 17,82	B.
	δ Cygni.....	0. 14,9	12,8	16,2	13,1	14,9	15,1			96. 30. 14,48				45. 14. 18,17	B.
	Σ 2596.....	1. 25,0	22,1	26,0	22,6	24,4	26,4	10,494	+2	126. 21. 24,46	29,738	58,0	53,7	75. 6. 4,35	B.
	(c) Σ 2655. s.....	4. 45,1	41,9	47,7	42,9	44,8	46,1			119. 29. 44,37				68. 14. 14,37	B.
	Σ 2655. n.....	.....	.....	.....	.....	.....	.....			119. 29. 38,03				68. 14. 8,03	B.
	(d) Σ 2662.....	3. 63,2	59,7	65,9	60,6	63,2	64,9	9,850	+2	130. 44. 2,72	29,748	57,7	53,1	79. 28. 50,09	B.
	α Delphini R.....	3. 27,0	26,1	26,8	24,8	27,0	30,1			232. 13. 33,79				74. 37. 29,70	B.
	α Delphini.....	2. 49,8	47,9	53,0	47,9	50,6	51,7			125. 52. 49,97				74. 37. 29,28	B.
Aug. 8	ν Ophiuchi.....	4. 2,0	1,1	6,1	0,9	4,3	4,2	12,428		150. 59. 2,70	29,776	60,0	56,4	99. 44. 45,95	B.
	70 Ophiuchi.....	2. 15,3	15,1	17,5	14,1	17,0	17,9			138. 42. 15,93				87. 27. 19,52	B.
	72 Ophiuchi.....	2. 7,8	7,0	10,9	6,1	9,0	9,2			131. 42. 8,13				80. 26. 57,11	B.
	(e) δ Ursæ Minoris R.	1. 29,3	27,6	30,8	29,1	29,2	32,1	9,930	+1¼	303. 25. 42,92	29,752	58,9	54,5	3. 23. 58,07	B.
	δ Ursæ Minoris...	0. 44,9	43,0	43,4	43,2	44,9	46,9			54. 40. 44,41				3. 24. 1,32	B.
	Σ 2676.....	2. 5,1	2,3	7,0	3,0	3,0	5,9			114. 37. 4,18				63. 21. 27,99	B.
	α Delphini R.....	3. 28,1	27,0	28,1	26,6	27,1	30,9	9,947	+1¾	232. 13. 33,11	29,748	52,8		74. 37. 30,37	B.
	α Delphini.....	2. 48,9	46,9	52,1	46,3	49,0	51,0			125. 52. 48,83				74. 37. 28,23	B.
	(f) α Lyræ R.....	4. 25,7	20,9	25,3	23,1	23,6	27,9			255. 29. 28,93	29,722	52,7	48,5	51. 21. 5,55	B.
	α Lyræ.....	1. 58,9	49,1	55,5	50,9	52,0	52,0	9,501	+1¾	102. 36. 53,19				51. 21. 3,31	B.
Aug. 15	(g) * R. 18h. 41m. 1s.	3. 33,9	30,1	36,4	32,1	33,2	35,4			125. 8. 33,05				73. 53. 11,50	B.
	ζ Aquilæ R.....	4. 28,9	24,9	28,2	25,3	26,9	31,8	9,250		230. 29. 41,49	29,728	52,4	48,6	76. 21. 25,57	B.
	ζ Aquilæ.....	1. 43,1	40,2	45,0	41,9	43,1	44,1			127. 36. 42,68				76. 21. 25,08	B.
	θ Cygni R.....	2. 21,8	18,2	22,2	19,8	18,1	23,9			266. 42. 39,99				40. 7. 42,85	B.
	θ Cygni.....	3. 46,2	41,7	48,5	42,2	44,0	45,8	11,900		91. 23. 44,25	29,680	53,2	50,5	40. 7. 42,73	B.
	Piazzi XIX. 307..	2. 21,0	18,1	22,9	18,8	19,0	22,9			131. 17. 20,15				80. 2. 8,96	B.
	Σ 2408.....	3. 55,9	54,9	59,8	55,1	58,1	59,1	12,205		130. 38. 56,65	29,654	55,3	52,9	79. 23. 43,74	B.
	(h) 2 Equulei.....	0. 14,1	11,3	15,4	12,9	15,2	16,9			134. 40. 14,27				83. 25. 9,28	B.
	(h) Σ 2767.....	0. 6,9	3,9	8,4	5,1	6,3	7,2			121. 55. 6,28				70. 39. 39,65	B.
	(h) Σ 2786.....	2. 16,2	14,0	18,7	14,8	16,2	18,0	11,534		132. 22. 16,02	29,676	53,5	51,7	81. 7. 6,44	B.
	ν Cephei R.....	0. 36,2	34,4	36,9	35,2	35,7	37,8			277. 15. 0,31				29. 35. 11,82	B.
Aug. 20	ν Cephei.....	1. 26,9	22,5	26,9	23,9	26,0	28,2			80. 51. 25,55	30,146	57,0	55,1	29. 35. 13,32	B.
	Σ 2847.....	3. 28,0	25,0	29,6	25,6	28,9	31,5	9,310		145. 27. 45,66				94. 13. 8,57	B.
	Σ 2849.....	4. 41,2	37,0	42,6	37,7	40,2	41,9			121. 44. 39,50				70. 29. 12,68	B.
	ε Cephei R.....	2. 27,1	26,8	28,0	26,1	25,7	30,0	10,378	+½	273. 6. 59,13	30,154	56,6	54,9	33. 43. 17,22	B.
	ε Cephei.....	4. 28,9	24,1	29,9	25,9	27,1	30,9			84. 59. 27,22				33. 43. 19,21	B.
	Groombridge 2614	1. 10,3	7,6	12,8	8,9	10,2	11,7	11,011	+1	90. 16. 10,29	30,152	55,8	52,8	39. 0. 7,63	B.
	δ Cygni R.....	1. 28,6	27,4	28,9	29,4	30,0	31,7			261. 36. 12,15				45. 14. 15,92	B.
	δ Cygni.....	0. 9,9	6,7	11,0	7,1	9,9	9,9			96. 30. 9,65				45. 14. 13,36	B.
	Σ 2621.....	1. 23,9	22,5	26,0	23,1	26,1	26,2	9,310	+2	132. 26. 24,45	30,140	56,4	54,0	81. 11. 15,61	B.
	(i) Σ 2655.....	4. 35,2	32,1	37,1	32,5	36,6	37,2			119. 29. 34,52				68. 14. 4,88	B.
	(k) Σ 2676.....	1. 60,9	57,9	62,2	57,9	59,9	61,0			114. 36. 59,74				63. 21. 23,77	B.
Aug. 22	B.A.C. 7079.....	0. 12,7	10,0	14,9	10,9	14,9	14,8	10,378	+1½	130. 30. 13,00	30,140	55,0	51,5	79. 15. 0,63	B.
	α Cygni R.....	4. 21,1	19,3	22,0	21,1	21,9	24,9			261. 34. 39,52				45. 15. 48,61	B.
	α Cygni.....	1. 45,9	42,3	46,9	42,9	45,8	46,8			96. 31. 44,88				45. 15. 48,65	B.
	(l) α Cephei R.....	1. 28,5	28,1	28,1	27,1	28,0	30,1	10,378	+1½	278. 46. 24,29	30,140	55,0	51,5	28. 3. 46,14	B.
	α Cephei.....	4. 60,1	56,6	62,4	56,5	59,8	61,9			79. 19. 59,54				28. 3. 45,61	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10', 153, 10', 172, 10', 190, 10', 203, 10', 222 at the five wires. From Aug. 8 = 10', 156, 10', 175, 10', 193, 10', 206, 10', 225. From Aug. 15 = 10', 154, 10', 173, 10', 191, 10', 204, 10', 223. ONE REVOLUTION = 20'', 850. CORRECTION for RUNS = -2'', 4. From Aug. 8 = -2'', 9. From Aug. 15 = -3'', 9. ZENITH POINT = 89°. 3'. 12'', 09. From Aug. 8 = 89°. 3'. 12'', 04. From Aug. 15 = 89°. 3'. 12'', 18. ASSUMED CO-LATITUDE = 37°. 47'. 8'', 28.

(a) Much obscured by cloud. (b) Unsteadiness. (c) The stars have nearly the same R.A. (d) Faint. (e) Unsteady. Times by M, 18h. 25m. 1s and 18h. 26m. 12s. M fast on H, 4m. 10s. (f) Blazing. (g) Mistaken for Σ 2400. The star is Bessel Z. 308. 18h. 39m. 28s. (h) Seen to be double, but observed as single. (i) Doubtful bisection, the star being faint. This is the north star: see Aug. 7. (k) Very faint. (l) The wires too close. The star was badly defined from haze.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.	
		A	B	C	D	E	F					Int.	Ext.			
		" "	" "	" "	" "	" "	" "					Inch.	" "			
Aug.26	15 Sagittæ.....	0.42,5	40,2	44,0	41,0	44,0	43,6	9,777	+2½	124.35.42,55	29,960	59,7	53,5	73.20.19,05	B.	
	Σ 2662.....	3.59,1	56,1	62,1	56,9	59,9	61,9			130.43.59,30						
	Σ 2701.....	3.52,7	49,1	55,5	52,0	53,1	54,7			129.43.53,01						
	α Cygni R.....	4.29,5	27,8	29,8	28,8	29,8	32,7			261.34.38,63						
	(a) α Cygni.....	1.43,1	38,1	43,7	39,1	42,3	43,8	5,028	+2½	96.31.42,27	29,962	57,6	51,0	78.28.38,17	B.	
	Σ 2749.....	4.13,0	10,9	14,9	10,5	13,6	16,2			138.19.13,13						
	(b) Σ 2767.....	0.50,1	1,0	5,4	2,9	4,4	4,9			121.55.3,98						
	(b) Σ 2786.....	2.13,9	11,2	16,0	12,9	14,9	15,9			132.22.14,12						
	β Aquarii R.....	0.31,7	31,2	31,2	30,7	34,2	34,7	6,359	+2½	210.37.20,36	56,5	52,9	96.14.35,33	B.		
	β Aquarii.....	3.61,9	59,1	64,1	60,0	63,9	65,2			147.29.2,17						
	α Aquarii R.....	1.31,9	32,0	31,2	29,9	32,9	34,1			215.47.52,08						
	α Aquarii.....	3.31,0	29,1	35,0	29,7	34,5	35,8			142.18.32,48						
Aug.27	Groombridge 2614	1.13,2	8,1	15,6	10,7	11,9	13,9	9,417	+1½	90.16.12,22	30,136	56,4	53,2	39.0.8,55	B.	
	B.A.C. 6428.....	4.63,5	58,6	63,9	60,0	61,2	64,1			92.40.1,83						
	ζ Aquilæ R.....	4.27,1	25,1	27,1	24,9	27,9	30,8			230.29.43,45						
	ζ Aquilæ.....	1.41,8	36,3	42,7	38,1	40,2	41,9			127.36.40,26						
	ρ² Sagittarii.....	3.26,3	21,7	29,1	23,9	27,9	30,0	7,801	+1	159.48.26,45	30,146	54,9	50,0	108.35.7,76	B.	
	β Aquilæ R.....	2.21,7	17,0	21,0	18,9	20,7	24,1			222.53.10,59						
	β Aquilæ.....	3.15,9	10,7	17,8	13,8	14,4	18,1			135.13.15,13						
	(c) Σ 2621. n.f.....	1.21,3	17,0	23,9	20,1	21,1	23,9			132.26.21,41						
	32 Cygni R.....	0.29,6	25,1	30,0	28,1	28,1	32,2	10,609	+3	264.5.20,34	30,148	54,4	50,6	42.45.6,23	B.	
	32 Cygni.....	1.6,2	0,8	7,5	3,4	3,2	6,5			94.1.4,75						
	Aug.29	(d) π Sagittarii R....	0.12,7	10,9	12,9	11,9	13,8	14,2	2,340	+1½	195.37.56,62	30,274	57,7	52,4	111.15.39,57	B.
		π Sagittarii.....	3.27,0	23,4	28,1	26,0	28,0	30,4			162.28.27,12					
Σ 2500.....		0.31,5	27,9	31,9	30,8	31,8	33,1	121.48.49,02								
ρ² Sagittarii.....		3.26,5	23,1	28,8	24,1	27,9	30,1	159.48.26,56								
θ Cygni R.....		2.28,9	21,3	29,7	26,8	27,1	31,4	9,430	+1½	266.42.44,08	30,280	56,1	52,0	40.7.39,79	B.	
θ Cygni.....		3.42,8	36,9	43,1	38,9	40,2	42,9			91.23.40,77						
α² Capricorni R....		4.23,0	18,0	23,3	20,3	22,6	25,9			203.51.33,32						
α² Capricorni.....		4.50,9	47,1	54,1	48,1	51,2	45,2			154.14.49,43						
Σ 2701.....		3.54,0	48,9	56,1	50,9	52,4	54,9	3,909	+1½	129.43.53,11	55,0	49,8	103.0.55,23	B.		
2 Equulei.....		0.12,0	6,2	12,9	9,0	12,1	13,9			134.40.11,02						
Σ 2749.....		4.11,9	8,5	13,7	7,9	11,6	14,1			138.19.11,23						
(e) α Cephei R.....		1.27,0	23,8	27,0	24,9	25,7	28,8			278.46.28,27						
α Cephei.....		4.60,1	55,0	62,2	56,9	59,3	62,0	10,101	+3	79.19.59,20	30,270	53,9	48,3	87.4.14,98	B.	
										28.3.43,06						
Aug.30		(f) Groombridge 2614	1.12,1	8,6	13,9	10,1	11,3	13,0			90.16.11,48	30,296	57,6	54,5	39.0.7,81	B.
	B.A.C. 6428.....	4.62,6	58,1	64,8	59,8	61,9	64,1	92.40.1,83								
Aug.31	Groombridge 2614	1.10,6	9,1	13,1	10,0	12,0	11,2			90.16.10,93	30,292	60,0	56,2	39.0.7,43	B.	
Sept. 3	Σ 2847.....	2.41,1	38,9	44,8	40,2	42,8	46,1	15,059	+1	145.27.42,15	30,196	54,7	46,9	94.13.6,38	B.	
	(g) Σ 2868.....	4.25,9	23,3	28,4	23,9	24,6	30,8			119.27.44,47						
	ε Cephei R.....	2.24,0	22,9	25,9	23,4	22,5	26,8			273.7.0,66						
	ε Cephei.....	4.23,6	20,5	26,1	21,7	23,7	27,1			84.59.23,74						
Sept. 4	(h) α Aquilæ R.....	3.20,8	18,1	20,2	18,9	19,4	23,7	6,909	+1	225.19.28,83	30,172	53,9	48,3	81.31.48,88	B.	
	α Aquilæ.....	1.53,9	52,1	56,3	54,1	55,1	57,1			132.46.54,85						
	Σ 2621. n.f.....	1.17,5	14,9	19,7	17,5	16,8	20,1			132.26.18,09						
	32 Cygni R.....	0.27,4	24,9	28,8	25,8	26,6	30,8			264.5.22,45						
	32 Cygni.....	1.4,1	0,1	6,1	4,1	2,9	5,2	10,430	+1	94.1.3,85	30,170	52,8	45,5	42.45.4,25	B.	
	Σ 2786.....	2.10,9	8,6	4,2	9,1	12,0	14,5			132.22.9,75						
Sept. 6	(i) B.A.C. 6590.....	1.26,9	23,9	29,1	18,9	28,9	30,9	10,301	+1	157.1.24,58	30,154	52,8	47,7	105.47.45,73	B.	
	(k) Σ 2767.....	4.63,9	59,1	65,9	54,9	61,2	65,0			121.55.1,67						
	β Aquarii R.....	0.35,0	33,1	36,1	26,8	36,0	37,9			210.37.23,37						
	β Aquarii.....	3.61,9	57,9	65,0	53,0	62,1	64,8			147.29.0,48						
	ε Pegasi R.....	2.25,1	23,8	25,9	17,1	26,8	29,0	4,962	+1	226.1.44,68	49,3	45,3	96.14.33,29	B.		
	ε Pegasi.....	4.41,1	38,0	44,9	32,9	41,2	44,1			132.4.40,07						
	Σ 2847.....	2.42,9	40,0	45,1	34,6	43,0	45,0			145.27.41,55						

MICROMETER READING for COINCIDENCE with fixed Wire = 10',164, 10',183, 10',201, 10',214, 10',233 at the five wires.
 From Aug. 31 = 10',159, 10',178, 10',195, 10',212, 10',229. From Sept. 6 = 10',166, 10',185, 10',202, 10',219, 10',236.
 ONE REVOLUTION = 20'',850. CORRECTION for RUNS = -0'',3. From Aug 31 = -1'',8. From Sept. 6 = -2'',1. ZENITH
 POINT = 89°.3'.13'',19. From Aug. 31 = 89°.3'.13'',02. From Sept. 6 = 89°.3'.12'',07. ASSUMED Co-LATITUDE = 37°.47'.8'',28.

(a) Great unsteadiness. (b) Observed as single. (c) 'Appeared the larger of the two.' The south star seems to have been taken on Aug. 22.
 (d) The microscope readings were 2' greater. (e) Difficult, the wires being too close. (f) Faint. (g) The observer thought the micrometer
 was slightly touched before reading off. (h) Badly defined and unsteady. (i) Wires too close. The micrometer was used to be ready for ρ² Sagit-
 tarii as on Sept. 9. (k) Observed as single. No correction for Runs.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.		Observer.
		A	B	C	D	E	F					Int.	Ext.			
		"	"	"	"	"	"					Inch.	"	"	"	
Sept. 6	Σ 2868.....	4. 27,8	25,1	30,1	19,9	26,5	31,0	15,284		119. 27. 40,47	30,154	49,8	45,4	68. 12. 11,50		B.
	Σ 2869.....	2. 33,9	29,9	36,0	24,1	31,9	35,1			127. 22. 31,63				76. 7. 14,72		B.
Sept. 8	ζ Aquilæ R.....	4. 20,1	20,7	20,7	24,0	22,0	26,0	9,061		230. 29. 45,74	30,096	56,2	55,2	76. 21. 20,86		B.
	ζ Aquilæ.....	1. 39,1	37,3	41,1	31,8	41,1	40,0		+1 $\frac{1}{2}$	127. 36. 38,36				76. 21. 20,82		B.
	B.A.C. 6590.....	2. 46,1	45,1	49,0	39,9	50,1	49,9	13,921		157. 1. 28,93		56,5	54,9	105. 47. 47,69		B.
	Σ 2500.....	3. 47,9	45,8	49,0	39,1	48,1	48,0			121. 48. 46,05				70. 33. 19,63		B.
	θ Cygni R.....	2. 36,0	35,0	36,2	29,4	35,3	39,7	9,749		266. 42. 44,52				40. 7. 38,21		B.
	θ Cygni.....	3. 39,9	35,9	41,8	30,7	39,8	40,9			91. 23. 37,92				40. 7. 36,51		B.
	α^2 Capricorni R...	0. 27,0	25,2	26,5	20,9	28,2	29,0	7,014		203. 51. 32,58	30,100	55,6	52,1	103. 0. 53,51		B.
	α^2 Capricorni.....	4. 51,9	51,2	56,5	45,2	56,1	57,1			154. 14. 52,67				103. 0. 54,62		B.
	Σ 2701.....	3. 54,4	53,0	57,1	47,1	55,2	56,0			129. 43. 53,53		55,4	51,0	78. 28. 40,04		B.
	η Cephei R.....	0. 27,6	26,8	27,9	21,2	28,1	31,0	11,481		278. 5. 0,40		55,2	50,4	28. 45. 10,63		B.
	η Cephei.....	1. 26,8	23,9	28,3	17,9	27,2	28,9			80. 1. 25,40				28. 45. 12,29		B.
	(a) Σ Equulei.....	1. 27,0	25,9	28,9	20,0	30,1	31,0	13,800		134. 40. 12,02				83. 25. 8,07		B.
	Σ 2749.....	4. 11,5	11,1	14,3	4,9	14,0	15,9			138. 19. 11,65				87. 4. 15,85		B.
	(b) Σ_2 430.....	3. 11,2	8,0	13,1	2,8	12,0	12,9			117. 43. 9,78		55,1	50,0	66. 27. 38,07		B.
Sept. 9	B.A.C. 6590.....	2. 23,9	23,3	27,2	17,9	29,3	28,0	12,951		157. 1. 27,45	29,974	57,9	55,5	105. 47. 45,46		B.
	ρ^2 Sagittarii.....	3. 28,9	30,0	33,1	23,2	35,0	33,6			159. 48. 30,38				108. 35. 10,52		B.
	Σ 2622.....	2. 27,9	26,6	29,5	21,5	30,1	30,1	14,790		124. 40. 51,78	29,968	57,2	53,3	73. 25. 29,56		B.
	α^2 Capricorni R...	0. 32,9	32,1	32,1	27,9	35,6	35,9	7,471	+ $\frac{1}{4}$	203. 51. 29,75				103. 0. 55,48		B.
	α^2 Capricorni.....	4. 52,6	51,9	56,8	45,9	57,9	57,8		+2	154. 14. 53,33				103. 0. 54,42		B.
	α Cygni.....	4. 26,0	25,1	26,9	20,9	27,7	30,8	9,391		261. 34. 42,84		56,8	51,0	45. 15. 45,16		B.
	α Cygni.....	1. 41,1	38,1	42,6	33,9	42,1	42,6			96. 31. 39,95				45. 15. 43,81		B.
	(c) Σ_2 471.....	4. 62,8	62,0	63,9	56,1	65,4	65,0			134. 25. 2,53				83. 9. 57,43		B.
	B. xxii. 741.....	1. 37,0	36,6	38,1	29,1	40,5	39,9		+2	141. 16. 36,75		55,9	53,7	90. 1. 47,64		B.
	B.A.C. 8188 R.....	2. 29,1	28,0	30,2	22,9	29,1	32,8	10,665		274. 32. 18,85	29,962	55,0	49,9	32. 17. 55,89		B.
	B.A.C. 8188.....	3. 65,9	63,9	68,1	57,8	67,1	67,8		+1	83. 34. 5,06				32. 17. 55,66		B.
Sept. 12	θ Cygni R.....	2. 26,1	25,0	27,1	20,8	27,6	31,0	9,171		266. 42. 47,75	29,960	57,6	53,2	40. 7. 35,72		B.
	θ Cygni.....	3. 37,8	35,1	40,0	29,8	39,9	39,9			91. 23. 37,03				40. 7. 34,86		B.
	(d) β Aquilæ R.....	2. 32,1	31,3	31,1	24,9	34,1	35,8	8,322		222. 53. 10,74	29,952		52,5	83. 58. 10,80		B.
	β Aquilæ.....	3. 12,8	11,9	16,1	6,1	15,5	17,5			135. 13. 13,27				83. 58. 9,17		B.
	15 Sagittæ.....	0. 40,7	37,2	42,3	33,0	42,7	42,4			124. 35. 39,72				73. 20. 16,66		B.
	α^2 Capricorni R...	0. 55,1	54,2	56,1	51,2	58,9	59,2	8,588		203. 51. 29,44		56,8	51,9	103. 0. 56,83		B.
	α^2 Capricorni.....	4. 50,5	50,6	55,1	44,8	55,9	57,0			154. 14. 52,25				103. 0. 52,88		B.
	α Cephei R.....	1. 28,1	27,1	27,9	22,9	28,6	32,5	10,059		278. 46. 30,83	29,960	55,4	49,7	28. 3. 40,26		B.
	α Cephei.....	4. 55,0	52,1	58,1	46,0	56,0	57,6			79. 19. 54,07				28. 3. 39,52		B.
	Σ 2849.....	4. 36,9	33,8	39,4	28,2	37,0	39,4			121. 44. 35,72		54,2	49,4	70. 29. 8,70		B.
	Σ 2868.....	4. 26,1	24,8	29,9	19,1	27,1	30,9	15,300		119. 27. 39,97				68. 12. 9,74		B.
	(e) Σ 2869.....	2. 32,1	28,9	34,9	23,7	32,1	35,0			127. 22. 31,08				76. 7. 12,73		B.
	Σ_2 471.....	4. 62,0	58,9	64,9	54,0	63,0	65,2			134. 25. 1,27	29,958	54,4	48,5	83. 9. 56,00		B.
Sept. 13	B.A.C. 6590.....	2. 26,0	25,1	28,1	19,9	30,7	30,5	12,889		157. 1. 30,67	29,778	57,8	53,7	105. 47. 47,53		B.
	ρ^2 Sagittarii.....	3. 29,8	31,1	34,0	24,2	34,2	34,7			159. 48. 31,28				108. 35. 10,17		B.
Sept. 17	Σ 8.....	0. 36,4	35,2	38,9	30,2	40,7	40,0			145. 10. 36,88	29,348	59,0	57,6	93. 55. 56,05		B.
Sept. 18	Σ 2849.....	4. 36,2	32,9	37,1	27,0	37,1	38,4		+1 $\frac{1}{4}$	121. 44. 34,81	29,400	57,1	55,1	70. 29. 6,66		B.
	Σ 2869.....	2. 32,9	30,2	34,5	23,9	34,0	34,9			127. 22. 31,70				76. 7. 11,97		B.
	(f) B.A.C. 8154. f....	2. 24,1	22,9	28,4	16,9	27,6	27,9		+1	150. 32. 24,57	29,414	55,6	53,5	99. 18. 4,43		B.
	Σ 8.....	0. 36,9	34,9	38,2	30,0	39,1	39,9			145. 10. 36,50	29,422	54,9	52,7	93. 55. 56,72		B.
Sept. 19	ρ^2 Sagittarii.....	3. 39,9	39,8	44,0	34,0	44,0	44,0	10,800		159. 48. 28,27	29,864	54,7	50,6	108. 35. 8,48		B.
	* \mathcal{A} . 19 ^h . 13 ^m . 30 ^s	3. 18,8	17,2	21,9	13,2	22,1	22,5		+1	162. 8. 19,05				110. 55. 23,16		B.
	15 Sagittæ.....	0. 40,1	36,9	42,4	33,1	41,1	40,9			124. 35. 39,05	29,896	53,7	49,1	73. 20. 15,96		B.
	(g) B.A.C. 6896.....	...	...	...	...	...	...	16,284	+1	124. 33. 32,64				73. 18. 9,50		B.
	32 Cygni R.....	0. 39,8	37,9	41,7	35,2	40,9	43,8	10,872		264. 5. 25,88				42. 45. 0,53		B.
	32 Cygni.....	0. 59,1	55,0	62,0	52,8	59,1	60,0		+2 $\frac{1}{4}$	94. 0. 58,77				42. 44. 59,06		B.
	(h) α Cephei R.....	1. 32,1	29,3	32,9	26,1	30,1	33,9	10,051		278. 46. 33,80	29,900	51,5	46,2	28. 3. 37,47		B.
	α Cephei.....	4. 53,9	49,9	57,1	45,1	52,9	55,8			79. 19. 52,18				28. 3. 37,33		B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10', 166, 10', 185, 10', 202, 10', 219, 10', 236 at the five wires. From Sept. 12 = 10', 167, 10', 186, 10', 203, 10', 220, 10', 237. From Sept. 19 = 10', 166, 10', 185, 10', 202, 10', 219, 10', 236. ONE REVOLUTION = 20", 850. CORRECTION for RUNS = -2", 1. From Sept. 12 = -0", 4. From Sept. 19 = -1", 7. ZENITH POINT = 89°. 3'. 12", 07. From Sept. 12 = 89°. 3'. 12", 82. From Sept. 19 = 89°. 3'. 13", 06. ASSUMED Co-LATITUDE = 37°. 47'. 8", 28.

(a) The micrometer reading has been increased by 2". (b) This is Bessel Z. 315. 21^h. 3^m. 57^s. The R.A. of H. C. 41144 belongs to a star preceding this by 12". (c) No correction for Runs. (d) During this observation the object end of the Telescope was slightly struck. (e) The companion not seen: no other star in the field. (f) This appeared rather the larger of the two. (g) The N.P.D. agrees with Piazzi's, but not with that of B.A.C. (h) Unsteadiness and bad definition.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle Reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"	"	
Sept. 19	(a) ϵ Pegasi R.	1. 27,8	25,1	26,9	20,4	29,0	30,1	9,296	+1	226. 1. 45,37	29,904	51,3	45,5	80. 49. 30,84	B.
	ϵ Pegasi.....	4. 38,0	35,1	41,9	30,0	39,6	41,2			132. 4. 37,40				80. 49. 27,49	
	(b) Σ 471.....	4. 62,2	56,8	65,1	53,1	61,9	64,5			134. 25. 0,32				83. 9. 55,24	
	B.A.C. 8154. f. ...	2. 20,9	17,8	25,0	14,2	22,8	24,9			150. 32. 20,80				99. 18. 4,43	
Sept. 22	(c) α Pegasi R.	3. 34,4	31,1	33,8	25,2	34,1	36,9	9,046	+1 $\frac{1}{2}$	231. 13. 56,94	29,904	52,0	46,8	75. 37. 9,93	B.
	α Pegasi.....	2. 24,8	21,9	28,3	17,1	25,4	27,1		+2 $\frac{1}{2}$	126. 52. 24,26				75. 37. 5,01	
	(d) B.A.C. 8188 R....	2. 23,7	22,2	26,9	18,1	23,4	27,1	10,116	+1 $\frac{1}{2}$	274. 32. 25,23	29,908	51,9	45,8	32. 17. 50,46	B.
	B.A.C. 8188.....	3. 60,1	56,0	62,5	51,9	59,9	60,8			83. 33. 58,83				32. 17. 48,40	
	ψ Andromedæ R. ...	4. 23,3	21,0	24,9	16,0	21,9	27,1	9,710	+2	262. 24. 32,38				44. 25. 55,81	B.
	ψ Andromedæ ...	1. 53,4	49,0	54,2	44,7	52,9	53,9			95. 41. 51,86				44. 25. 53,93	
Sept. 23	(e) ρ Sagittarii.....	1. 26,4	25,0	29,5	19,9	29,1	29,9	18,965		159. 48. 23,84	30,208	51,9	43,5	108. 35. 8,40	B.
	(f) α Aquilæ R.	3. 24,0	21,1	24,9	16,6	24,4	26,1			225. 19. 30,37				81. 31. 48,25	
	α Aquilæ.....	1. 51,6	50,1	55,0	45,2	53,0	53,9	6,954	+1 $\frac{1}{2}$	132. 46. 51,42	30,216	50,9	41,6	81. 31. 43,92	B.
	15 Sagittæ.....	0. 40,5	33,9	41,9	30,6	38,3	39,0			124. 35. 37,33				73. 20. 15,34	
	B.A.C. 6896.....	16,312	+1 $\frac{1}{4}$	124. 33. 30,44				73. 18. 8,40	B.
	(b) Σ 430.....	4. 18,0	15,0	21,3	11,9	17,1	20,9			117. 43. 6,92	30,204	45,6	40,0	66. 27. 35,00	B.
	π Cygni R.	1. 33,9	28,6	34,7	26,0	30,0	36,9	9,936	+2	265. 26. 36,46				41. 23. 48,68	
	(e) π Cygni.....	4. 45,1	41,2	48,1	35,9	43,7	45,7			92. 39. 46,10	30,212	44,9	39,3	41. 23. 45,12	B.
	B. xxii. 741.....	1. 36,9	32,9	38,1	28,9	35,0	39,0	11,521	+4 $\frac{1}{4}$	141. 16. 35,05				90. 1. 47,95	
	8 Andromedæ R. ...	1. 36,1	31,9	36,0	27,7	31,0	38,2			265. 1. 5,89	30,198	43,9	38,0	41. 49. 19,71	B.
	8 Andromedæ.....	0. 25,0	20,0	26,0	16,0	21,1	23,1			93. 5. 21,85				41. 49. 21,33	
	(g) B.A.C. 8154. f. ...	2. 18,9	16,8	22,6	13,0	18,1	22,1			150. 32. 18,45				99. 18. 4,33	
Sept. 24	* \mathcal{R} . 19 ^h . 13 ^m . 30 ^s .	3. 16,0	15,9	19,2	11,3	18,2	19,9	13,799		162. 8. 16,57	30,100	50,8	45,9	110. 55. 23,99	B.
	(b) Σ 430.....	4. 23,8	20,5	26,9	17,2	23,6	27,1			117. 43. 7,92				66. 37. 25,68	
	δ Equulei.....	1. 45,9	43,7	49,0	39,1	46,9	48,6	8,871	+1 $\frac{1}{2}$	131. 51. 45,43	30,068	48,3	42,5	80. 36. 35,74	B.
	(b) B. xxii. 741.....	1. 34,9	30,9	36,3	25,9	34,8	36,3			141. 16. 33,10				90. 1. 45,31	
Sept. 25	(h) α Pegasi R.	3. 30,9	28,9	31,1	22,2	30,0	34,0	8,871	+2 $\frac{3}{4}$	231. 13. 57,25	30,032	46,7	38,9	75. 37. 10,57	B.
	α Pagasi.....	2. 23,9	19,9	28,1	15,7	23,1	24,9			126. 52. 22,76				75. 37. 4,46	
	(i) 15 Sagittæ.....	0. 40,4	38,1	42,9	32,0	42,0	40,8	16,253	+1	124. 35. 39,33	29,658	52,4	52,8	73. 20. 15,60	B.
Sept. 26	(b) B.A.C. 6896.....	...	...	...	...	...	...			124. 33. 33,56				73. 18. 9,78
	(k) * \mathcal{R} . 19 ^h . 13 ^m . 30 ^s .	3. 16,4	16,9	19,6	11,9	19,9	22,0	8,825	+1 $\frac{1}{2}$	162. 8. 17,93	29,808	51,7	46,4	110. 55. 23,29	B.
Sept. 27	γ Aquilæ R.	0. 32,4	31,0	32,7	25,9	33,8	36,0			227. 6. 0,78	29,816	51,1	47,3	79. 45. 13,06	B.
	γ Aquilæ.....	0. 23,1	20,5	25,0	15,8	25,1	26,0	10,620	+3	131. 0. 22,66				79. 45. 10,38	
	(l) Σ 2622.....	0. 48,9	44,4	50,8	39,1	50,0	49,1			124. 40. 47,48	29,820	51,0	47,4	73. 25. 24,57	B.
	δ Equulei.....	1. 46,0	44,1	48,9	39,4	48,8	49,7	9,602	+1 $\frac{3}{4}$	131. 51. 46,23				80. 36. 35,56	
	β Aquarii R.	2. 31,0	29,4	31,4	24,3	33,9	35,8			210. 37. 22,45	29,858	50,8	47,9	96. 14. 33,76	B.
	β Aquarii.....	3. 61,7	58,7	65,1	53,8	64,8	65,6	10,620	+1 $\frac{3}{4}$	147. 29. 1,75				96. 14. 31,84	
	(m) π Cygni R.	1. 25,9	24,8	27,9	19,7	27,3	30,6			265. 26. 38,88	29,858	49,7	42,8	41. 23. 46,15	B.
	π Cygni.....	4. 44,9	41,1	47,9	36,8	46,2	48,0	24,619	+2 $\frac{1}{2}$	92. 39. 45,43				41. 23. 44,34	
	Σ 2936.....	4. 48,9	45,1	52,1	41,1	50,2	52,8			140. 49. 48,58	29,860	48,0	43,1	89. 34. 58,68	B.
	(n) B.A.C. 8188 R. ...	2. 27,7	26,0	30,0	22,6	27,9	32,9			274. 32. 27,46				32. 17. 48,21	
	B.A.C. 8188.....	3. 60,6	56,9	64,1	52,0	61,7	62,4			83. 33. 59,80				32. 17. 49,35	
	γ Cephei R.	1. 27,9	26,0	28,9	20,9	30,0	32,7	10,372	+3 $\frac{3}{4}$	293. 36. 24,25	29,728	55,1	54,2	13. 13. 30,50	B.
	γ Cephei.....	4. 59,0	56,9	61,6	50,8	60,9	63,0			64. 30. 0,88				13. 13. 30,19	
Sept. 27	Σ 8.....	0. 33,0	32,1	35,0	26,9	37,1	36,9	11,983	+1 $\frac{3}{4}$	145. 10. 33,53	29,730	54,8	53,1	93. 55. 54,65	B.
	α Cassiopeiæ R. ...	2. 29,1	27,6	30,6	22,0	29,1	33,1			272. 31. 51,64				34. 18. 25,85	
	α Cassiopeiæ.....	4. 34,1	29,9	37,1	25,6	35,2	37,8	17,098		85. 34. 33,50	29,728	53,9	51,8	34. 18. 25,55	B.
	ϕ Ceti.....	2. 27,0	25,9	31,0	19,9	30,9	33,4			153. 20. 4,43	29,730	53,1	50,9	102. 5. 59,51	B.
	(m) * \mathcal{R} . 0 ^h . 49 ^m . 50 ^s .	3. 37,0	34,8	40,0	28,9	40,7	43,0	16,814		154. 18. 37,57				103. 4. 37,99	
	* \mathcal{R} . 0 ^h . 58 ^m . 10 ^s .	0. 32,4	31,9	36,0	25,2	37,0	37,0			150. 43. 15,49				99. 28. 57,92	
	28 Ceti.....	3. 58,9	56,1	63,1	52,0	61,9	64,0	9,962		151. 53. 59,52				100. 39. 47,38	B.
	ξ Andromedæ R. ...	3. 36,3	36,1	38,0	30,8	37,6	41,0			261. 33. 41,88	29,732	52,8	50,4	45. 16. 46,73	
	ξ Andromedæ.....	2. 44,2	39,7	46,0	35,8	44,4	47,0	11,262		96. 32. 42,98				45. 16. 46,15	B.
	51 Andromedæ R. ...	1. 31,1	29,8	31,9	25,2	31,1	35,3			264. 41. 8,78				42. 9. 16,64	
	51 Andromedæ ...	0. 17,1	12,1	17,3	8,9	16,1	17,9			93. 25. 14,92				42. 9. 14,90	

MICROMETER READING for COINCIDENCE with Fixed Wire = 10', 166, 10', 185, 10', 202, 10', 219, 10', 236 at the five wires.
 From Sept. 26 = 10', 170, 10', 189, 10', 206, 10', 223, 10', 240. ONE REVOLUTION = 20'', 850. CORRECTION for RUNS = - 1'', 7.
 From Sept. 26 = + 1'', 4. ZENITH POINT = 89°. 3'. 13'', 06. From Sept. 27 = 89°. 3'. 12'', 72. ASSUMED CO-LATITUDE = 37°. 47'. 8'', 23.

(a) Mercury slightly disturbed by wind: the star badly defined. (b) Very faint. (c) Cloudy. (d) Difficult, the wires being too close.
 (e) Very faint from clouds. (f) Great radiation. (g) Unsteady. Bad night for observing. (h) Unsteady and badly defined. (i) This is the following star.
 (k) Faint and unsteady. (l) Did not appear double. (m) Faint. (n) A mistake of 5' in setting.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.			Observer.	
		A	B	C	D	E	F					Int.	Ext.					
		"	"	"	"	"	"					Inch.	"	"	"	"		"
Sept. 27	B. 1. 736.....	4. 66,0	63,3	67,5	58,1	67,9	71,0			134. 20. 5,87	29,732	52,8	50,4	83. 4. 59,86			B.	
Sept. 30	δ Equulei.....	1. 43,0	42,9	46,9	38,1	46,6	47,9		+3	131. 51. 44,55	29,690	51,9	48,7	80. 36. 33,82			B.	
	(a) β Cephei R.....	3. 31,1	30,2	32,5	26,1	32,3	35,9			286. 43. 31,52				20. 6. 30,99			B.	
	β Cephei.....	2. 57,0	53,4	58,9	48,6	57,7	59,9			71. 22. 56,05				20. 6. 33,12			B.	
	π ² Cygni R.....	1. 30,1	29,8	31,6	24,9	30,9	35,3	9,769		265. 26. 39,62	29,696	51,9	47,1	41. 23. 45,05			B.	
	π ² Cygni.....	4. 45,4	41,1	47,9	37,0	45,6	47,8		+1 1/4	92. 39. 44,62				41. 23. 43,85			B.	
	(b) B.A.C. 8188 R....	2. 30,0	28,1	31,9	24,9	29,1	34,9	10,350	+1 1/2	274. 32. 26,91	29,714	49,4	45,9	32. 17. 48,48			B.	
	B.A.C. 8188.....	3. 55,1	51,9	57,9	47,1	55,0	55,3		+3	83. 33. 56,21				32. 17. 46,16			B.	
	ψ Andromedæ R....	4. 24,1	22,0	25,6	17,1	22,9	28,0	9,701		262. 24. 34,01		49,4		44. 25. 53,79			B.	
	ψ Andromedæ....	1. 51,2	47,0	53,0	42,9	51,0	51,4			95. 41. 49,50				44. 25. 51,86			B.	
	(c) φ ³ Ceti.....	2. 26,9	22,9	31,0	19,2	28,9	30,9	17,083		153. 20. 3,36	29,738	49,9	47,8	102. 5. 59,22			B.	
	(d) * R. 0 ^h . 49 ^m . 50 ^s .	3. 38,1	36,1	42,1	30,9	41,9	43,9			154. 18. 39,00				103. 4. 40,24			B.	
	(e) Polaris R.....	4. 24,2	21,0	26,1	16,9	23,1	27,8	11,659		305. 18. 53,16	29,740		47,4	1. 30. 45,10			B.	
(f) Polaris.....	2. 35,2	31,0	36,3	25,0	34,6	37,5			52. 47. 33,79				1. 30. 46,61			B.		
(g) B. 1. 568.....	1. 27,0	24,9	29,0	19,9	28,9	30,1		+3	137. 6. 26,80	29,748		46,9	85. 51. 27,22			B.		
(h) 1 Arietis. np.....	4. 56,9	54,2	60,8	48,2	56,1	58,1			119. 44. 55,95				68. 29. 26,15			B.		
(i) B. 1. 988.....	0. 32,9	29,2	35,6	23,9	33,9	34,9			130. 20. 31,75		49,6		79. 5. 18,53			B.		
Oct. 3	α Cassiopeiæ R....	2. 33,0	29,4	33,4	23,9	31,0	36,1	12,009		272. 31. 53,66	29,504	55,1	52,4	34. 18. 23,86			B.	
	α Cassiopeiæ.....	4. 33,7	27,1	33,9	24,1	32,6	35,9			85. 34. 31,43				34. 18. 23,51			B.	
	* R. 0 ^h . 49 ^m . 50 ^s .	4. 35,6	32,5	37,9	26,8	37,0	40,8	12,853		154. 18. 40,13				103. 4. 39,22			B.	
	φ ⁴ Ceti.....	1. 43,2	41,1	46,1	34,7	44,5	47,1			153. 26. 42,87				102. 12. 37,26			B.	
	η Ceti.....	3. 65,0	62,1	68,1	56,9	64,8	68,2			152. 14. 4,37		54,8	51,4	100. 59. 52,88			B.	
	B. 1. 51.....	4. 9,2	7,1	12,9	0,9	11,6	12,9		+1 1/5	149. 59. 9,23				98. 44. 47,60			B.	
	B. 1. 228.....	1. 47,2	43,1	48,9	37,6	48,0	49,0		+2 1/2	146. 36. 45,63				95. 22. 11,17			B.	
	B. 1. 497.....	4. 59,3	57,9	62,9	51,4	61,4	63,1			138. 14. 59,57				87. 0. 1,47			B.	
	B. 1. 576.....	1. 41,9	38,9	42,8	33,4	43,0	44,5			134. 56. 40,83		44,5	50,2	83. 41. 35,65			B.	
	Oct. 7	(i) α Cassiopeiæ R....	2. 27,9	25,7	29,0	19,0	24,5	31,0	11,681		272. 31. 55,40	29,418	45,7	41,2	34. 18. 22,49			B.
α Cassiopeiæ.....		4. 33,1	27,1	35,8	23,1	30,9	35,0			85. 34. 30,75				34. 18. 23,32			B.	
φ ⁴ Ceti.....		1. 42,1	38,8	45,9	33,1	41,5	45,0			153. 26. 41,03				102. 12. 37,40			B.	
B. o. 962.....		3. 37,2	33,6	40,9	28,1	35,6	40,9		+2 1/2	152. 43. 35,79				101. 29. 28,40			B.	
(c) 28 Ceti.....		3. 59,4	54,9	64,1	50,2	59,3	63,1		+3	151. 53. 58,17				100. 39. 46,68			B.	
(k) B. 1. 51.....		3. 68,3	64,0	72,8	58,1	67,9	71,1		+1	149. 59. 6,95				98. 44. 46,76			B.	
37 Ceti.....		...	...	...	...	...	...	9,661		149. 59. 18,33				98. 44. 53,15			B.
(l) B. 1. 237.....		0. 56,2	52,0	60,0	46,9	55,9	58,9			145. 50. 54,97	29,420	45,3	39,1	94. 36. 19,49			B.	
Oct. 9		B.A.C. 8188 R....	2. 25,3	22,6	27,8	18,0	23,5	29,0	9,896		274. 32. 30,80	29,318	48,6	43,0	32. 17. 45,07			B.
		B.A.C. 8188.....	3. 57,4	53,2	58,9	47,9	55,1	57,9			83. 33. 55,00				32. 17. 44,55			B.
	(m) ψ Andromedæ R....	4. 27,9	26,1	30,1	20,8	26,2	32,0	9,747		262. 24. 36,69		48,1	42,4	44. 25. 51,51			B.	
	ψ Andromedæ....	1. 50,1	45,1	51,2	40,2	48,8	50,4		+1 1/4	95. 41. 47,84				44. 25. 49,72			B.	
	α Andromedæ R....	0. 25,0	23,2	25,9	16,1	25,0	28,2	10,348		245. 5. 20,94		47,4	41,8	61. 45. 26,34			B.	
	α Andromedæ.....	0. 62,9	59,0	65,0	53,0	61,9	63,9		+1 1/2	113. 1. 1,11				61. 45. 22,07			B.	
	α Cassiopeiæ R....	2. 29,9	27,6	31,8	21,9	28,1	33,1	11,796		272. 31. 55,52	29,320	46,7	40,8	34. 18. 22,38			B.	
	α Cassiopeiæ.....	4. 31,9	26,2	35,0	21,9	30,9	34,0			85. 34. 29,92				34. 18. 21,50			B.	
	φ ⁴ Ceti.....	1. 41,6	37,6	45,9	32,9	42,5	44,6			153. 26. 40,82				102. 12. 36,89			B.	
	B. o. 962.....	3. 37,7	33,1	41,3	28,9	37,9	41,7			152. 43. 36,70				101. 29. 29,02			B.	
	28 Ceti.....	3. 60,0	55,1	64,8	51,0	60,8	63,9			151. 53. 59,20				100. 39. 47,43			B.	
	32 Ceti.....	2. 43,0	40,0	47,8	34,9	44,9	46,6		-1	150. 57. 42,79				99. 43. 26,63			B.	
	36 Ceti.....	0. 24,1	20,1	28,0	15,0	24,8	27,3			148. 50. 23,22				97. 35. 58,06			C.	
	B. 1. 223.....	4. 16,2	12,8	20,1	6,2	16,1	20,0			145. 29. 15,17				94. 14. 37,87			C.	
	B. 1. 276.....	0. 67,0	63,0	70,9	57,6	66,8	70,1		+1	143. 1. 5,88				91. 46. 20,92			C.	
	(n) θ Persei R.....	0. 34,1	29,9	36,3	26,4	31,9	37,4	12,627	+1 1/2	265. 24. 42,32	29,338	44,5	39,1	41. 25. 42,84			B.	
θ Persei.....	1. 39,6	35,0	42,0	29,4	38,0	41,1		+2 3/4	92. 41. 38,77				41. 25. 37,61			B.		
Oct. 10	α Pegasi R.....	3. 29,0	25,0	29,0	19,9	28,1	32,1	8,733		231. 13. 57,84	29,416	47,9	43,6	75. 37. 8,68			B.	
	α Pegasi.....	2. 24,9	20,9	27,9	15,1	24,8	27,2		+2	126. 52. 23,58				75. 37. 3,78			B.	
	8 Andromedæ R....	1. 26,9	23,9	27,9	19,1	27,2	30,2	11,029		265. 1. 8,69				41. 49. 16,85			B.	
	8 Andromedæ.....	0. 18,1	13,1	19,9	10,6	16,3	19,2			93. 5. 16,20				41. 49. 15,42			B.	
	ψ Andromedæ R....	4. 40,7	38,3	43,4	34,0	40,1	45,8	10,418		262. 24. 35,88	29,412	47,4	42,7	44. 25. 52,34			B.	
	ψ Andromedæ....	1. 49,3	43,1	50,6	38,9	47,9	49,9		+1 1/2	95. 41. 46,93				44. 25. 48,83			B.	

MICROMETER READING for COINCIDENCE with fixed Wire = 10', 170, 10', 189, 10', 206, 10', 223, 10', 240 at the five wires.
 ONE REVOLUTION = 20'', 850. CORRECTION for RUNS = + 1'', 4. From Oct. 7 = - 0'', 5. ZENITH POINT = 89°. 3'. 12'', 72.
 From Oct. 7 = 89°. 3'. 13'', 16. ASSUMED CO-LATITUDE = 37°. 47'. 8'', 28.

(a) Accidentally on the fixed wire. (b) The wires being so close, it was difficult to distinguish them in the direct observation. (c) Unsteady.
 (d) Faint. (e) Times by M, 1^h. 6^m. 40^s and 1^h. 8^m. 10^s. M fast on H, 1^m. 47^s. (f) Bisection doubtful, the star being very faint. (g) 'A close double.'
 (h) The northern and brightest of two: very faint. (i) Bad definition. (k) The pointer reading has been increased by 10'.
 (l) Very faint: clouds beginning to form. (m) Motion and indefiniteness. (n) The mercury disturbed by wind.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.		
		A	B	C	D	E	F					Int.	Ext.				
		"	"	"	"	"	"					r.	"	"		Inch.	o
Oct. 10	28 Ceti.....	3. 61,1	58,9	67,0	54,9	63,2	66,3	9,957	+1 $\frac{1}{4}$	151. 54. 1,83	29,390	47,1	44,6	100. 39. 49,43	B.		
	(a) 32 Ceti.....	2. 42,9	41,0	47,1	35,7	46,0	47,0			150. 57. 43,19				99. 43. 26,43	B.		
	i Persei R.....	3. 25,1	24,2	28,0	18,9	24,7	29,1			271. 58. 30,14	29,372	47,5	45,1	34. 51. 48,35	B.		
	(a) i Persei.....	2. 55,3	51,2	58,7	46,0	54,3	57,0			86. 7. 54,18				34. 51. 46,35	B.		
Oct. 11	θ Aquarii R.....	2. 30,1	29,4	31,5	23,0	31,2	34,0	4,860	+1	208. 19. 21,03	29,716	49,5	46,3	98. 32. 43,36	B.		
	θ Aquarii.....	1. 62,4	61,0	66,2	54,9	65,3	65,9	10,805		149. 47. 2,48				98. 32. 42,21	B.		
	δ Cephei R.....	3. 28,8	26,9	31,6	21,9	28,2	31,8			274. 28. 15,32	29,718	48,8	46,4	32. 21. 59,76	B.		
	δ Cephei.....	3. 9,0	5,9	12,0	0,6	12,8	11,1			83. 38. 8,38				32. 21. 58,80	B.		
	α Pegasi R.....	3. 30,9	28,9	31,1	22,2	31,8	34,9	8,820	+1	231. 13. 58,49	29,732	48,4		75. 37. 7,42	B.		
	α Pegasi.....	2. 23,1	20,8	27,0	15,0	24,0	26,5	11,239		126. 52. 22,0				75. 37. 3,85	B.		
	8 Andromedæ R..	1. 32,2	30,1	32,4	24,9	31,3	36,6			265. 1. 9,47				41. 49. 15,26	B.		
	8 Andromedæ....	0. 18,1	13,7	19,2	10,0	16,0	18,1			93. 5. 15,83				41. 49. 15,90	B.		
	B. 1. 576.....	1. 37,8	34,0	39,7	30,1	37,9	41,6	17,047		134. 56. 36,76	29,778	46,3	40,2	83. 41. 33,75	B.		
	B. 1. 736.....	4. 63,9	60,8	67,6	55,1	64,2	68,0			134. 20. 2,97				83. 4. 58,68	B.		
	B.A.C. 609.....	2. 25,9	22,1	28,7	17,4	24,1	28,0			129. 42. 24,35	29,780	45,8	39,2	78. 27. 11,12	C.		
	δ Ceti.....	2. 25,0	21,2	27,0	15,0	25,1	31,8			141. 35. 1,23	29,790	44,5	39,3	90. 20. 14,50	B.		
	(b) * R. 2 ^h . 31 ^m . 26 ^s ..	4. 23,8	18,1	27,1	13,9	22,5	26,0			125. 14. 21,92				73. 59. 1,28	B.		
	Oct. 13	ϵ Cephei R.....	2. 21,9	20,2	23,9	15,9	21,9	26,0	10,542	+1 $\frac{1}{2}$	273. 7. 14,33	30,374	52,7	49,3	33. 43. 2,06	B.	
		ϵ Cephei.....	4. 10,9	7,9	12,9	10,6	11,1	13,9	11,089		84. 59. 10,97				33. 43. 2,70	B.	
		8 Andromedæ R..	1. 28,8	26,1	28,9	21,2	28,6	33,0			265. 1. 9,10	30,376	51,7	47,7	41. 49. 15,71	B.	
8 Andromedæ....		0. 17,9	13,0	18,5	9,0	16,0	18,1	93. 5. 15,40						41. 49. 15,55	B.		
α Andromedæ R..		0. 28,6	27,0	28,0	21,3	28,9	33,0	10,515	+1 $\frac{1}{2}$	245. 5. 21,15	30,380	51,0	46,8	61. 45. 25,95	B.		
α Andromedæ....		0. 60,9	57,1	62,9	52,1	60,9	62,0	2,182		113. 0. 59,25				61. 45. 21,69	B.		
β Ceti R.....		0. 30,9	29,3	30,1	23,9	32,1	35,0			198. 3. 17,32	30,378	51,6	46,4	108. 49. 54,86	B.		
β Ceti.....		2. 63,7	62,1	66,9	56,6	67,4	69,5			160. 3. 4,07				108. 49. 51,59	B.		
B.A.C. 609.....		2. 25,8	21,2	27,1	16,7	25,1	28,0	17,125		129. 42. 23,83		50,2	46,6	78. 27. 10,95	B.		
δ Ceti.....		2. 27,1	25,2	29,2	18,9	30,0	32,9			141. 35. 2,64	30,382	50,0	45,9	90. 20. 16,37	B.		
Oct. 14	ψ Andromedæ R..	4. 27,2	27,9	29,2	21,9	28,9	32,7	9,739	+1 $\frac{1}{2}$	262. 24. 37,27	30,314	51,6	48,6	44. 25. 50,24	B.		
	ψ Andromedæ....	1. 47,2	43,7	49,1	38,8	47,8	48,7	11,789		95. 41. 46,13				44. 25. 48,98	B.		
	α Cassiopeiæ R...	2. 28,9	28,2	30,1	23,1	29,0	33,6			272. 31. 45,52		51,3	47,3	34. 18. 21,48	B.		
	α Cassiopeiæ....	4. 27,4	23,4	30,1	18,9	28,0	30,0			85. 34. 27,40				34. 18. 19,74	B.		
	B. o. 962.....	1. 58,9	57,6	62,4	52,1	62,1	62,9	19,941	+2 $\frac{1}{2}$	152. 43. 36,08		51,2	46,9	101. 29. 31,66	B.		
	* R. 0 ^h . 58 ^m . 10 ^s ..	0. 40,9	40,1	44,9	33,9	44,9	44,1	17,512		150. 43. 9,50				99. 28. 55,31	B.		
	32 Ceti.....	2. 41,2	39,9	44,9	35,8	44,8	45,9	+4 $\frac{1}{4}$		150. 57. 41,92				99. 43. 28,85	B.		
	37 Ceti.....	4. 17,9	16,1	21,8	10,4	21,0	22,9			149. 59. 18,10	30,308	50,9	46,7	98. 45. 0,68	B.		
	(c) B. 1. 186.....	2. 37,1	35,9	40,6	30,9	40,6	41,1			147. 22. 37,54				96. 8. 9,61	B.		
	B. 1. 276.....	0. 65,0	63,9	69,0	59,1	68,1	70,7	+2		143. 1. 5,90				91. 46. 23,45	B.		
	B. 1. 497.....	4. 57,0	57,9	61,6	50,1	60,4	62,0			138. 14. 57,87				87. 0. 2,63	B.		
	(d) B. 1. 736.....	4. 62,6	60,0	65,1	55,7	65,0	65,1			134. 20. 2,32	30,302	50,4	46,0	83. 4. 58,35	B.		
	B.A.C. 609.....	2. 26,0	23,0	28,0	17,7	26,2	28,0			129. 42. 24,67	30,298	51,2		78. 27. 11,72	B.		
	(e) * R. 1 ^h . 57 ^m . 25 ^s ..	0. 13,8	12,0	16,8	7,1	15,0	17,0			130. 5. 13,89				78. 50. 1,63	B.		
	Oct. 16	Σ 2936.....	4. 47,9	44,6	51,0	40,9	49,1	52,0	+3	+2	140. 49. 47,31	30,104	50,2	46,1	89. 34. 58,24	B.	
		(f) i Persei R.....	3. 30,0	28,1	31,9	22,3	28,1	34,3			271. 58. 28,90	30,080	46,8	42,4	34. 51. 48,67	B.	
i Persei.....		2. 55,9	51,9	57,9	46,9	54,0	56,9	86. 7. 54,61						34. 51. 47,52	B.		
Oct. 20	γ Cassiopeiæ R...	3. 27,9	25,0	29,4	20,9	27,0	31,7	10,811	+1 $\frac{1}{2}$	276. 43. 14,00	30,054	49,9	46,5	30. 6. 58,42	B.		
	γ Cassiopeiæ....	3. 10,2	6,1	13,0	2,0	9,8	12,1	16,601		81. 23. 10,34				30. 6. 58,60	B.		
	* R. 0 ^h . 58 ^m . 10 ^s ..	0. 29,0	26,9	32,1	22,2	31,6	31,0			150. 43. 15,53				99. 29. 0,75	B.		
	η Ceti.....	3. 61,1	58,9	65,0	54,9	63,6	64,8			152. 14. 1,20				100. 59. 53,60	B.		
	(g) 37 Ceti. sf.....	4. 18,8	16,4	22,8	11,7	21,9	22,9	14,409	+2 $\frac{1}{2}$	149. 59. 18,88				98. 45. 0,86	B.		
	B. 1. 186.....	2. 40,2	37,1	42,9	33,1	43,1	43,6			147. 22. 39,88	30,058	49,8	46,0	96. 8. 11,55	B.		
	(c) B. 1. 497.....	1. 26,2	24,7	28,9	18,8	28,8	29,1			138. 14. 58,26				87. 0. 2,80	B.		
	(h) B. 1. 568.....	2. 52,0	49,0	54,0	43,7	52,1	54,6			137. 6. 23,01	30,064	49,5	46,4	85. 51. 24,82	B.		
	B.A.C. 609.....	2. 27,1	21,8	29,2	17,1	25,1	27,8	11,764		129. 42. 24,76		49,2	45,8	78. 27. 11,69	B.		
	(i) * R. 1 ^h . 57 ^m . 25 ^s ..	0. 18,1	14,3	20,4	10,1	18,1	19,7			130. 5. 17,04				78. 50. 4,66	B.		
	θ Persei R.....	0. 21,2	18,0	22,9	14,0	20,2	24,1			265. 24. 47,44	30,064	48,9	45,7	41. 25. 36,68	B.		
	(k) θ Persei.....	1. 40,0	35,1	41,4	31,1	38,4	40,9			92. 41. 37,70				41. 25. 37,66	B.		

MICROMETER READING for COINCIDENCE with fixed Wire = 10', 170, 10', 189, 10', 206, 10', 223, 10', 240 at the five wires.
 From Oct. 11 = 10', 159, 10', 174, 10', 198, 10', 210, 10', 226. From Oct. 20 = 10', 161, 10', 176, 10', 200, 10', 212, 10', 228.
 ONE REVOLUTION = 20'', 850. CORRECTION for RUNS = -0'', 5. From Oct. 11 = -1'', 8. From Oct. 20 = -1'', 4. ZENITH POINT = 89° 3'. 13'', 16. From Oct. 11 = 89° 3'. 12'', 33. From Oct. 20 = 89° 3'. 12'', 08. ASSUMED CO-LATITUDE = 37° 47'. 8'', 28.

(a) Faint from clouds. (b) Bisection doubtful, the star being extremely faint. Mag. 9,10. The R.A. is derived from an imperfect transit taken Jan. 26, 1844, and not published. (c) Faint. (d) The clamp failed. No correction for Runs. (e) Doubtful bisection, the star being an extremely faint one. It was placed as nearly as possible opposite the large indenture of the comb. (f) By accident on the fixed wire. (g) The other star is B. 1. 93. (h) Supposed to be taken on the micrometer wire. (i) Too faint to admit of any illumination: observed as on Oct. 14. (k) Bad definition.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					"	"		
Oct. 21	α Cephei R.....	1.30,9	27,2	30,1	24,1	27,9	32,0	9,628		278.46.40,56	30,292	51,1	47,5	28.3.29,63	B.
	α Cephei.....	4.47,7	43,9	50,4	38,7	47,0	48,9			79.19.45,88				28.3.31,91	B.
	η Ceti.....	1.27,0	22,8	29,5	18,9	26,9	30,0	17,104		152.14.1,83		48,8	46,1	100.59.55,25	B.
	32 Ceti.....	2.42,7	39,8	46,3	35,0	43,9	45,9			150.57.42,13				99.43.29,41	B.
	(a) 37 Ceti.....	4.18,9	14,8	22,2	9,9	19,0	22,9			149.59.17,75				98.45.0,66	B.
	(a) B. I. 568.....	3.30,9	27,1	32,6	20,9	29,9	33,1	16,147	+2	137.6.25,54		48,5		85.51.27,89	B.
	(b) B. I. 736.....	4.63,8	59,8	65,7	55,9	64,0	65,1		+2	134.20.2,45				83.4.58,70	B.
	B.A.C. 609.....	3.23,2	18,0	26,4	14,1	21,0	25,0	12,900		129.42.24,83				78.27.12,11	B.
	θ Persei R.....	0.33,1	28,9	34,4	25,9	31,2	35,8	12,361	+1	265.24.46,55	30,286	48,3		41.25.37,60	B.
	θ Persei.....	1.38,7	32,9	39,7	29,0	36,0	39,0		+2	92.41.36,48				41.25.36,47	B.
Oct. 23	Σ 2936.....	4.47,1	44,0	50,2	40,1	48,9	50,9		+3	140.49.46,66	30,456	50,4	39,9	89.34.59,70	B.
	(c) α Pegasi R.....	3.30,2	26,9	29,0	21,9	30,2	32,8	8,725		231.13.59,08	30,454	48,7	38,9	75.37.8,41	B.
	α Pegasi.....	2.23,2	18,1	25,7	13,1	22,2	24,9		+1	126.52.21,14				75.37.4,47	B.
	(d) 8 Andromedæ R..	1.26,2	23,1	26,4	18,9	24,9	28,9	10,821		265.1.11,72				41.49.12,92	B.
	8 Andromedæ....	0.15,4	8,9	16,0	6,8	12,0	15,1		+1	93.5.12,52				41.49.13,00	B.
	B.A.C. 8188 R....	2.26,0	24,1	28,9	20,4	25,0	30,1	9,886		274.32.32,18	30,452	46,9	37,9	32.17.42,33	B.
	B.A.C. 8188.....	3.53,8	48,3	55,4	44,7	52,0	54,4			83.33.51,25				32.17.41,60	B.
	(e) B. I. 497.....	1.38,1	34,0	40,7	29,6	38,2	40,9	15,037		138.14.55,99	30,434	43,9	36,2	87.0.2,81	B.
	(e) B. I. 568.....	3.32,1	26,7	34,6	22,1	30,9	35,2	16,414	+3	137.6.21,53				85.51.25,57	B.
	B. I. 736.....	4.63,8	58,1	66,2	53,0	62,6	65,9			134.20.1,37	30,426	43,4	35,7	83.4.59,20	B.
	γ Arietis. s.....	2.67,9	60,1	70,2	57,2	63,8	67,1			122.43.4,25				71.27.41,10	B.
	γ Arietis. n.....	...	...	...	...	...	...	10,719		122.42.53,42				71.27.30,27	B.
	B.A.C. 609.....	2.24,4	18,0	26,9	15,1	21,9	25,9			129.42.21,93				78.27.10,56	B.
	(f) B. o. 1051.....	0.19,1	15,5	23,4	11,0	19,1	22,8		+2	150.45.18,37				99.31.6,08	B.
	32 Ceti.....	2.41,7	37,8	45,6	32,9	42,8	45,0		+2	150.57.40,74				99.43.29,41	B.
Oct. 24	(g) 37 Ceti.....	4.19,2	15,1	24,0	10,2	19,4	23,1			149.59.18,30		37,1		98.45.2,55	B.
	B. I. 228.....	1.45,9	41,0	49,2	36,2	46,0	48,7			146.36.44,42				95.22.15,18	B.
	B. I. 497.....	1.29,9	26,1	32,5	20,8	30,0	32,8	14,511		138.14.58,73	30,104		37,2	87.0.4,64	B.
	B. I. 568.....	3.24,8	20,5	27,4	14,9	23,8	28,0	15,858		137.6.25,11				85.51.28,28	B.
	B. I. 576.....	1.38,7	33,4	40,9	29,3	37,5	41,0		+2	134.56.36,80				83.41.35,10	B.
	(h) γ Arietis. s.....	2.65,9	59,1	69,3	54,2	63,8	66,9		+3	122.43.1,90		42,8	37,0	71.27.38,27	B.
	γ Arietis. n.....	...	...	...	...	...	...	10,670	+3	122.42.53,53				71.27.29,90	B.
	(i) Persei R.....	3.33,3	31,9	36,7	25,2	32,0	37,2			271.58.32,62				34.51.44,84	B.
	(i) Persei.....	2.52,9	47,1	56,1	43,0	50,1	53,9		+1 $\frac{3}{4}$	86.7.51,09				34.51.44,01	B.
	γ Ceti R.....	0.33,1	30,1	33,9	24,1	32,8	35,9	7,027		219.26.37,96	30,274	41,0	33,9	87.24.54,21	B.
Oct. 25	γ Ceti.....	4.46,1	43,8	50,4	37,9	46,8	50,9		+1 $\frac{1}{2}$	138.39.45,87				87.24.53,50	B.
	(k) α Persei R.....	4.46,5	43,8	50,1	38,8	43,2	50,7	12,797		266.8.51,39	30,272	40,0	33,6	40.41.32,26	B.
	α Persei.....	2.37,6	31,0	39,1	26,0	34,2	39,0			91.57.34,40				40.41.33,51	B.
	Σ 2936.....	4.48,5	45,2	54,5	41,1	49,1	53,8			140.49.48,55	30,280	44,7	40,4	89.35.0,88	B.
	32 Ceti.....	2.40,7	37,2	44,0	32,0	42,1	44,8			150.57.40,05	30,276	43,8	38,2	99.43.28,92	B.
	36 Ceti.....	0.19,2	17,3	22,6	11,0	21,2	24,2		+3	148.50.19,05				97.35.58,58	B.
	B. I. 228.....	0.30,9	27,9	33,9	22,5	32,4	35,0	21,230	+2 $\frac{1}{2}$	146.36.41,29				95.22.12,19	B.
	B. I. 237.....	0.50,7	47,1	54,1	43,1	52,0	54,0			145.50.50,15				94.36.18,32	B.
	B. I. 576.....	1.37,6	33,9	39,0	28,4	37,2	40,9			134.56.36,12		43,1	37,1	83.41.34,59	B.
	(h) γ Arietis. s.....	2.65,9	59,1	69,3	54,2	63,8	66,9		+3	122.43.1,90		42,8	37,0	71.27.38,27	B.
Oct. 29	γ Arietis. n.....	...	...	...	...	...	...	10,670	+3	122.42.53,53				71.27.29,90	B.
	(i) Persei R.....	3.33,3	31,9	36,7	25,2	32,0	37,2			271.58.32,62				34.51.44,84	B.
	(i) Persei.....	2.52,9	47,1	56,1	43,0	50,1	53,9		+1 $\frac{3}{4}$	86.7.51,09				34.51.44,01	B.
	γ Ceti R.....	0.33,1	30,1	33,9	24,1	32,8	35,9	7,027		219.26.37,96	30,274	41,0	33,9	87.24.54,21	B.
	γ Ceti.....	4.46,1	43,8	50,4	37,9	46,8	50,9		+1 $\frac{1}{2}$	138.39.45,87				87.24.53,50	B.
	(k) α Persei R.....	4.46,5	43,8	50,1	38,8	43,2	50,7	12,797		266.8.51,39	30,272	40,0	33,6	40.41.32,26	B.
	α Persei.....	2.37,6	31,0	39,1	26,0	34,2	39,0			91.57.34,40				40.41.33,51	B.
	51 Andromedæ R..	1.45,7	43,7	47,9	38,0	45,4	49,1	11,721		264.41.13,37	29,800	47,9	45,3	42.9.11,66	B.
	51 Andromedæ....	0.9,9	5,0	10,8	0,2	9,0	9,1		+1	93.25.7,50				42.9.7,99	B.
	(l) γ Andromedæ R..	0.57,0	56,1	58,0	50,6	58,7	61,2	10,400		258.25.52,89		44,9		48.24.38,67	B.
Oct. 31	γ Andromedæ....	0.31,8	27,0	33,7	21,9	32,6	33,1		+1 $\frac{1}{2}$	99.40.30,30				48.24.57,32	B.
	(m) B. I. 988.....	0.27,7	24,2	29,9	18,9	28,2	31,3		+3	130.20.26,94	30,120	44,6	38,6	79.5.15,70	B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10',161, 10',176, 10',200, 10',212, 10',228 at the five wires.
 From Oct. 25 = 10',169, 10',184, 10',208, 10',220, 10',236. ONE REVOLUTION = 20',850. CORRECTION for RUNS = - 1",4.
 From Oct. 25 = - 0",9. ZENITH POINT = 89°. 3'. 12",08. From Oct. 25 = 89°. 3'. 12",27. ASSUMED CO-LATITUDE = 37°. 47'. 8",28.

(a) Very faint from clouds. (b) No correction for Runs. (c) Indefinite. (d) Unsteady and badly defined. (e) Faint. (f) Taken by mistake for the star R.A. 0^h. 58^m. 10^s, which precedes. (g) 'A small star preceded.' (h) Clouded at intervals. (i) Accidentally on the fixed wire: appeared pretty well bisected, but was very unsteady and badly defined. (k) Difficult to bisect, so indefinite and unsteady. (l) Clouds passing. (m) Very faint. This is the north star of two.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					"	"		
Oct. 31	(a) δ Persei R.....	3.40,6	38,2	42,9	31,9	39,9	44,8	10,420		271.58.35,20	30,120	44,3	37,6	34.51.42,27	B.
	δ Persei.....	2.50,1	44,9	52,0	39,9	47,9	50,9		+2	86.7.48,39				34.51.41,32	B.
	δ Ceti R.....	0.33,1	31,5	33,7	24,2	32,8	36,1	7,868		216.31.21,19		43,8	37,4	90.20.17,85	B.
	δ Ceti.....	4.59,0	55,8	63,0	50,3	61,0	64,0		+3	141.34.58,69				90.20.13,19	B.
	(b) α Ceti R.....	0.49,6	47,1	49,8	41,3	50,0	52,0	11,281		220.20.26,47				86.31.2,61	B.
	α Ceti.....	0.53,9	51,0	56,9	45,6	53,9	57,1		+4 $\frac{1}{4}$	137.45.53,20				86.30.57,74	B.
	(c) α Persei R.....	4.28,9	26,9	30,9	20,8	26,9	32,9	12,054		266.8.49,26		42,9	36,0	40.41.34,36	B.
	α Persei.....	2.35,0	29,1	36,1	23,7	31,9	36,9			91.57.32,03				40.41.31,11	B.
Nov. 1	(b) α Aquarii R.....	1.29,7	25,9	29,6	20,3	29,7	32,2	6,001		215.47.55,84	30,100	46,9	42,3	91.3.44,75	B.
	α Aquarii.....	3.31,1	26,9	34,5	21,2	31,9	34,9		+1	142.18.30,32				91.3.45,69	B.
	ϵ Cephei R.....	2.26,4	23,9	27,1	18,9	24,0	29,7	10,629		273.7.16,52		46,4	41,5	33.43.0,12	B.
	ϵ Cephei.....	3.69,2	63,8	70,9	58,9	67,1	71,1			84.59.7,10				33.42.58,52	B.
	8 Andromedæ R..	1.29,2	26,0	29,7	20,6	28,0	32,0	10,878		265.1.13,84	30,102	44,6	39,0	41.49.11,28	B.
	8 Andromedæ....	0.14,8	8,1	15,2	4,1	10,0	13,9		+1 $\frac{1}{4}$	93.5.11,29				41.49.11,19	B.
Nov. 3	α Andromedæ R..	0.45,0	42,1	45,7	36,9	43,8	48,5	11,141		245.5.24,38	30,306	44,2	36,1	61.45.23,53	B.
	α Andromedæ....	0.58,0	53,8	60,9	48,9	57,2	59,1			113.0.56,38				61.45.19,07	B.
	* \mathcal{R} . 0 ^h . 49 ^m . 50 ^s ..	3.34,9	31,3	39,5	26,7	36,9	40,2			154.18.35,15	30,300	42,8	34,5	103.4.42,49	C.
	(d) B. 1. 51.....	3.66,1	62,3	70,1	57,9	68,0	70,9			149.59.6,22				98.44.51,23	B.
	B. 1. 223.....	4.13,0	10,1	16,0	4,1	13,8	18,8			145.29.12,92		42,4	33,8	94.14.40,43	B.
	B. 1. 576.....	1.37,9	32,6	40,7	28,9	38,2	40,8		+1 $\frac{1}{2}$	134.56.36,66		42,3	33,5	83.41.35,31	B.
	(e) B. 1. 988.....	0.28,0	23,9	30,0	18,1	26,3	30,1		+3	130.20.26,36	30,296	41,9	33,2	79.5.15,69	B.
	δ Persei R.....	3.31,8	27,2	33,1	23,0	29,6	33,9	9,916		271.58.36,22		41,8	32,5	34.51.41,54	B.
	(f) δ Persei.....	2.52,9	45,7	54,1	41,7	49,0	53,0		+1 $\frac{1}{2}$	86.7.50,06				34.51.42,60	B.
	(f) θ Persei R.....	0.30,1	27,8	32,2	22,2	29,9	34,1	12,010		265.24.51,96	30,292	41,5		41.25.32,82	B.
	θ Persei.....	1.37,1	31,3	38,9	25,3	35,4	38,9		+1 $\frac{3}{4}$	92.41.35,10				41.25.34,66	B.
	Nov. 4	α Andromedæ R..	0.49,1	45,8	51,3	40,9	49,0	52,9	11,278		245.5.26,04	29,982	41,2	39,1	61.45.21,42	B.
α Andromedæ....		0.61,0	55,1	63,8	51,2	59,7	60,0			113.0.58,53				61.45.20,77	B.
α Cassiopeia R....		2.28,1	23,9	30,7	20,0	26,6	31,0	11,387		272.32.2,42	29,976	42,2	38,1	34.18.14,83	B.
α Cassiopeia.....		4.24,1	18,8	27,8	14,2	23,2	25,9			85.34.22,62				34.18.14,65	B.
ϵ Piscium R.....		2.30,9	26,0	31,6	21,9	30,1	33,0	2,798		223.55.3,71	29,968	42,1	37,7	82.56.17,33	B.
ϵ Piscium.....		1.22,4	18,7	24,7	14,0	22,1	25,0		+1	134.11.21,24				82.56.17,06	B.
B. 1. 51.....		0.27,1	24,9	30,9	18,9	29,0	29,1	13,951		149.59.8,75				98.44.51,85	B.
H. C. 2553.....		1.13,0	8,9	16,2	5,2	13,9	16,1			144.31.12,30	29,960	42,1	36,5	93.16.35,05	B.
B.A.C. 549.....		0.13,9	8,0	17,4	4,7	13,6	14,6			125.0.12,05	29,950	42,1	37,8	73.44.51,12	B.
(g) α Piscium. \mathcal{R}		0.29,0	25,9	32,3	21,1	30,2	31,2	15,108		139.13.46,28				87.58.53,65	B.
B.A.C. 650.....		2.42,9	37,1	46,0	33,1	42,1	42,9		+1	123.57.40,89				72.42.18,33	B.
θ Persei R.....		0.46,0	41,9	49,0	38,9	44,9	49,4	12,830		265.24.50,52	29,926	41,3	34,8	41.25.34,20	B.
θ Persei.....	1.37,8	32,7	39,2	27,0	36,6	38,0			92.41.35,32				41.25.34,82	B.	
Nov. 10	θ Persei R.....	0.33,0	28,9	30,3	22,0	30,1	33,0	11,961		265.24.53,07	29,354	49,9	41,6	41.25.30,61	B.
	θ Persei.....	1.33,7	29,9	35,9	25,1	34,7	36,0			92.41.32,43				41.25.32,71	B.
	α Ceti R.....	4.26,1	24,0	27,7	17,7	28,2	29,9	7,349		220.20.24,99	29,352	49,1	40,9	86.31.1,30	B.
	α Ceti.....	0.57,2	56,0	61,1	50,9	60,8	60,9		+2	137.45.57,78				86.31.0,67	B.
Nov. 14	ω Piscium R.....	1.26,1	23,1	25,0	17,9	24,9	30,9	8,011		222.52.10,46	29,972	44,8	37,4	83.59.11,95	B.
	ω Piscium.....	4.12,8	9,0	17,2	5,2	13,1	17,0		+1 $\frac{1}{2}$	135.14.12,12				83.59.11,13	B.
	α Andromedæ R..	0.46,2	32,1	45,9	28,1	34,7	39,1	10,689		245.5.27,78				61.45.18,93	B.
	α Andromedæ....	0.57,9	51,0	60,7	47,0	56,1	57,1		+1 $\frac{3}{4}$	113.0.55,14				61.45.18,37	B.
	α Cassiopeia R..	2.25,8	21,9	27,9	18,0	23,9	30,8	11,153		272.32.4,93	29,968	43,4	35,9	34.18.11,39	B.
	α Cassiopeia.....	4.21,1	15,9	25,1	12,0	20,2	24,1		+1	85.34.19,64				34.18.12,56	B.
	(h) ϕ^4 Ceti.....	1.40,1	36,8	45,3	31,2	40,2	45,2		+1	153.26.39,65	29,960	42,6	35,6	102.12.41,17	B.
	(i) 36 Ceti.....	0.23,0	18,0	26,9	13,9	23,0	27,2			148.50.21,98		42,0	35,1	97.36.1,67	B.
Nov. 17	(i) B. 1. 237.....	0.53,1	47,6	57,3	44,7	53,8	57,0		+2 $\frac{1}{2}$	145.50.52,11	29,952	41,8	34,7	94.36.20,55	B.
	(k) * \mathcal{R} . 0 ^h . 58 ^m . 10 ^s ..	3.21,4	18,1	26,0	14,5	23,4	27,1		+3	150.43.21,40	29,464	43,1	40,8	99.29.5,99	B.
	(l) δ Persei R.....	3.41,1	38,9	43,9	32,1	40,1	44,2	10,360		271.58.36,67	29,456	43,2	40,4	34.51.40,48	B.
	δ Persei.....	2.45,0	40,1	48,0	35,8	43,9	46,5		+2 $\frac{3}{4}$	86.7.44,73				34.51.38,16	B.
Nov. 18	(m) H. C. 2553.....	1.14,9	11,9	18,6	8,1	17,9	19,8			144.31.15,17	29,340	46,7	44,0	93.16.35,56	B.

MICROMETER READING FOR COINCIDENCE with Fixed Wire = 10', 169, 10', 184, 10', 208, 10', 220, 10', 236 at the five wires.
 From Nov. 1 = 10', 175, 10', 190, 10', 214, 10', 226, 10', 242. From Nov. 10 = 10', 174, 10', 189, 10', 213, 10', 225, 10', 241.
 From Nov. 17 = 10', 163, 10', 178, 10', 202, 10', 214, 10', 230. ONE REVOLUTION = 20", 850. CORRECTION FOR RUNS = -0", 9.
 From Nov. 1 = +2", 0. From Nov. 10 = -2", 2. From Nov. 17 = -1", 0. ZENITH POINT = 89°. 3'. 12", 27. From Nov. 1 = 89°. 3'. 12", 61. From Nov. 10 = 89°. 3'. 11", 70. From Nov. 17 = 89°. 3'. 11", 86. ASSUMED CO-LATITUDE = 37°. 47'. 8", 28.

(a) Unsteady. (b) Bad definition. (c) The observer thought that the micrometer was accidentally touched before reading off. (d) The microscope readings have been diminished by 1'. (e) Very faint: the other star not seen. (f) Unsteady and indefinite. (g) Appeared a close double: \mathcal{R} was thought to be taken. (h) Faint. (i) Very misty. (k) Bisection doubtful, the star being faint from cloud. (l) Extremely faint. (m) 'A small star seen following.'

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	"		
Nov. 18	B.A.C. 549.....	0.12,9	7,9	16,6	5,0	13,9	15,1			125. 0. 11,90	29,358	46,4	43,5	73. 44. 50,37	B.
	(a) B. r. 988.....	0.37,0	34,1	40,9	29,1	38,6	40,9	10,504	+2½	130. 20. 31,53	29,352	46,2	43,8	79. 5. 18,81	B.
	i Persei R.....	3.30,5	27,9	33,1	22,3	30,1	34,2	9,760		271. 58. 38,78		46,0	43,0	34. 51. 38,39	B.
	(b) i Persei.....	2.45,6	40,1	47,9	36,0	44,6	47,0		+2	86. 7. 44,31				34. 51. 37,76	B.
	θ Persei R.....	0.32,2	28,8	34,8	24,1	32,9	36,1	12,091		265. 24. 52,08		45,7	42,8	41. 25. 31,75	B.
	θ Persei.....	1.32,7	27,1	34,7	23,9	32,1	34,9		+1¼	92. 41. 31,12				41. 25. 31,23	B.
Nov. 19	* R. 0 ^h . 58 ^m . 10 ^s ..	3.22,0	19,4	26,0	14,7	26,0	26,8			150. 43. 22,37	28,990	49,8	49,0	99. 29. 3,29	C.
	B. r. 51.....	4.14,1	12,1	18,8	7,0	18,5	19,1			149. 59. 14,80				98. 44. 52,75	B.
	B. r. 223.....	4.20,1	16,9	23,7	11,9	23,0	24,9			145. 29. 19,95	28,988	49,9	48,9	94. 14. 41,35	C.
	B.A.C. 549.....	0.14,0	10,0	17,7	6,2	16,5	16,0		+1	125. 0. 13,44	28,980	49,8	48,6	73. 44. 50,93	B.
	(c) * R. 1 ^h . 57 ^m . 25 ^s ..	0.46,9	44,1	50,7	39,9	49,0	48,9	11,130		130. 5. 27,19	28,974	49,8	48,6	78. 50. 12,89	C.
Nov. 20	B. r. 51.....	4.11,1	8,1	15,8	3,7	14,0	16,1			149. 59. 11,33	29,202	46,5	42,9	98. 44. 51,31	B.
	B. r. 223.....	1.27,1	24,8	30,8	19,9	30,0	31,5	16,390		145. 29. 18,27				94. 14. 41,54	B.
	H. C. 2553.....	1.13,9	11,6	17,9	7,9	16,0	19,2		+2	144. 31. 14,35	29,206	45,8	42,8	93. 16. 34,56	B.
	B.A.C. 490.....	2.39,4	34,1	43,0	29,9	39,0	41,1			129. 57. 37,67	29,214	45,5	42,6	78. 42. 24,06	C.
	(c) * R. 1 ^h . 57 ^m . 25 ^s ..	4.61,1	55,1	65,4	51,0	60,1	63,0		+3	130. 4. 59,39	29,226	45,0	42,4	78. 49. 46,14	B.
	α Persei R.....	4.26,5	21,8	29,0	18,1	25,5	30,6	11,708		266. 8. 53,69	29,260	43,4	40,2	40. 41. 29,40	B.
	α Persei.....	2.31,0	25,1	32,1	20,8	29,5	33,1		+1	91. 57. 28,69				40. 41. 28,06	B.
	δ Persei R.....	3.28,7	23,9	31,0	19,9	27,2	33,8	12,040		264. 7. 48,97	29,270	43,3	39,6	42. 42. 36,19	B.
	δ Persei.....	3.34,9	30,1	38,1	25,2	34,9	37,1		+1½	93. 58. 33,64				42. 42. 35,08	B.
	(d) ε Persei R.....	4.25,0	21,3	27,9	17,2	24,9	29,9	11,036	+½	256. 24. 7,36				50. 26. 25,87	B.
	ε Persei.....	2.18,1	12,7	21,0	7,9	17,1	20,0		+2	101. 42. 16,54				50. 26. 26,05	B.
	(e) Σ 520.....	4.61,8	58,0	65,0	51,3	60,9	63,1		+3	118. 50. 0,41	29,290	42,9	40,2	67. 34. 30,17	B.
Nov. 22	(f) α Andromedæ R.....	0.25,9	21,1	26,3	17,0	24,0	28,9	10,127		245. 5. 25,83	29,598	42,7	37,4	61. 45. 20,07	B.
	α Andromedæ.....	0.60,0	64,1	63,2	51,1	58,9	61,2		+1	113. 0. 59,83				61. 45. 23,13	B.
	B. r. 223.....	4.16,7	11,0	9,4	6,2	15,9	21,0		+1½	145. 29. 13,34	29,594	40,6	35,9	94. 14. 39,63	B.
	(g) H. C. 2553.....	1.11,4	5,9	15,1	4,3	11,9	15,5		+3	144. 31. 10,60				93. 16. 33,71	B.
	B.A.C. 490.....	2.38,7	31,9	41,9	27,9	36,3	39,9		+2	129. 57. 36,22				78. 42. 24,63	B.
	i Persei R.....	3.28,7	24,6	31,0	20,9	27,1	31,9	9,640		271. 58. 39,49	29,600	40,0	36,2	34. 51. 37,06	B.
	(h) i Persei.....	2.45,9	39,4	48,3	36,9	43,7	47,1		+1¾	86. 7. 44,21				34. 51. 38,16	B.
	θ Persei R.....	0.22,1	16,9	24,3	15,8	20,8	26,0	11,468		265. 24. 54,98	29,604	39,9	36,0	41. 25. 28,38	B.
	θ Persei.....	1.33,6	26,6	35,0	23,8	31,7	34,9			92. 41. 30,93				41. 25. 31,69	B.
Nov. 25	(i) Polaris R.....	4.25,9	21,2	29,8	16,8	25,1	31,2	10,938		305. 19. 10,02	29,900	41,3	39,6	1. 30. 25,89	B.
	Polaris.....	2.16,0	11,6	19,0	6,1	15,0	19,9			52. 47. 14,73				1. 30. 28,04	B.
	(h) B.A.C. 632.....	4.39,1	34,1	43,2	29,1	40,8	42,3			123. 44. 38,10	29,896	41,4	40,3	72. 29. 16,22	B.
Nov. 27	(k) B.A.C. 490.....	2.38,9	36,2	40,8	30,0	39,8	41,8		+2½	129. 57. 38,11	29,794	47,9	47,6	78. 42. 25,63	B.
Dec. 1	(l) H. C. 43487.....	3.19,9	15,2	23,3	10,9	19,1	21,0			111. 58. 18,35	29,808	44,2	42,1	60. 42. 38,99	C.
	(m) * R. 22 ^h . 33 ^m . 1 ^s ..	3.66,2	61,2	70,1	57,1	66,2	68,1			113. 9. 4,95	29,824	44,0		61. 53. 27,05	B.
	(n) * R. 22 ^h . 41 ^m . 23 ^s ..	3.11,1	6,7	14,9	2,9	12,0	13,9			113. 38. 10,35				62. 22. 33,06	B.
	(o) * R. 22 ^h . 49 ^m . 29 ^s ..	1.45,8	41,0	48,9	36,1	45,0	45,9		+3	114. 26. 44,51		43,8	41,9	63. 11. 8,24	B.
	* R. 23 ^h . 8 ^m . 20 ^s ..	2.33,4	28,4	36,0	22,8	32,3	34,0			117. 22. 31,23				66. 6. 58,76	B.
	(p) * R. 23 ^h . 14 ^m . 50 ^s ..	4.49,2	44,8	53,8	39,9	49,7	50,9			117. 59. 48,22			43,0	66. 44. 16,51	B.
	B.A.C. 490.....	2.40,1	37,8	44,1	31,1	58,9	42,1		+1	129. 57. 39,13	29,840	42,7	40,7	78. 42. 26,14	B.
	α Persei R.....	4.27,1	22,9	30,1	20,1	26,0	31,2	11,640		266. 8. 56,69	29,876	42,9	41,3	40. 41. 27,21	B.
	α Persei.....	2.28,9	23,0	31,0	18,1	27,1	30,1		+1½	91. 37. 26,84				40. 41. 25,52	B.
	δ Persei R.....	3.27,9	24,7	30,6	20,7	26,9	32,1	12,026	+1	264. 7. 49,57				42. 42. 36,43	B.
Dec. 3	δ Persei.....	3.33,9	27,9	36,1	23,3	32,0	35,0		+2¼	93. 58. 32,31				42. 42. 33,09	B.
	(r) H. C. 43487.....	3.19,9	12,8	22,1	9,0	17,1	19,9			111. 58. 16,92	29,340	41,8	35,7	60. 42. 37,50	B.
	o Pegasi.....	1.25,6	22,6	28,9	16,8	24,3	28,1	14,227		112. 45. 0,80	29,344	40,4	35,3	61. 29. 22,35	B.
	(s) H. C. 45649.....	2.60,2	53,2	64,0	49,1	57,0	59,0		+3	116. 52. 57,79	29,352	39,2	36,0	65. 37. 24,55	B.
Dec. 5	(s) * R. 23 ^h . 14 ^m . 50 ^s ..	4.45,1	39,0	48,9	34,0	44,1	46,0		+3	117. 59. 43,58				66. 44. 11,82	B.
	(r) H. C. 43487.....	3.19,9	15,0	22,9	10,1	19,2	21,0			111. 58. 18,13	29,396	43,7	41,5	60. 42. 38,46	B.
	(t) * R. 22 ^h . 33 ^m . 1 ^s ..	0.43,8	40,9	46,8	36,1	44,0	45,9	14,988	+3	113. 9. 5,13		42,8	41,4	61. 53. 26,89	B.

MICROMETER READING FOR COINCIDENCE with Fixed Wire = 10^h.163, 10^h.178, 10^h.202, 10^h.214, 10^h.230 at the five wires. From Nov. 22 = 10^h.182, 10^h.197, 10^h.221, 10^h.233, 10^h.249. From Dec. 1 = 10^h.174, 10^h.194, 10^h.216, 10^h.226, 10^h.245. ONE REVOLUTION = 20^h.850. CORRECTION for RUNS = -1^h.0. From Nov. 22 = 0^h.0. From Dec. 1 = +1^h.0. ZENITH POINT = 89^o.3'.11^h.86. From Nov. 22 = 89^o.3'.11^h.30. From Dec. 1 = 89^o.3'.12^h.61. ASSUMED CO-LATITUDE = 37^o.47'.8", 28.

(a) Would not bear illumination, and the bisection was consequently very doubtful. (b) Delayed by failure of the tangent-screw. (c) Not brighter than mag. 10; so faint it could only be bisected by guess. All the observations of this star are extremely uncertain. (d) Disturbed mercury. (e) Delayed by failure of the tangent-screw. The star was quite alone and was not perceived to be double. (f) Wires inconveniently close. (g) The bisection appeared good. A small star followed. (h) Faint from cloud. (i) Times by M, 1^h.6^m.49^s and 1^h.7^m.48^s. M fast on II, 2^m.49^s. (k) Divisions indistinct from moisture. (l) A following star seen. (m) A fainter of less N.P.D. followed. (n) Bisection doubtful from faintness. 'Mag. 9.' (o) Unsteady illumination of the field owing to wind, and star faint. (p) 'Mag. 7.8.' A faint star of the same N.P.D. follows. (q) Faint from cloud. (r) The following star seen. (s) Bisection doubtful from faintness. (t) Taken hurriedly.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.			Observer.
		A	B	C	D	E	F					Int.	Ext.				
		"	"	"	"	"	"					Inch.	°	'	"		
Dec. 5	(a)* \mathcal{R} . 22. 41 ^m . 23 ^s .	3. 12,8	6,9	15,0	2,8	11,4	15,1		+3	113. 38. 11,48	29,396	42,8	41,4	62. 22. 33,84			B.
	(b)* \mathcal{R} . 23 ^h . 8 ^m . 20 ^s .	2. 29,9	24,8	31,8	19,1	29,8	31,0		+2	117. 22. 28,09	29,392	42,8	41,9	66. 6. 55,16			B.
	(c)* \mathcal{R} . 23 ^h . 14 ^m . 50 ^s .	4. 49,7	45,0	53,7	39,9	50,4	51,7			117. 59. 48,57				66. 44. 16,46			B.
	B. 1. 237.....	0. 59,9	55,9	63,1	52,0	61,1	63,2			145. 50. 59,23	29,390	43,2	41,6	94. 36. 23,75			B.
	θ Persei R.....	0. 54,7	51,3	57,1	46,1	54,0	58,5	12,910	-1 $\frac{1}{2}$	265. 24. 56,76		41,8	39,3	41. 25. 27,86			B.
	θ Persei.....	1. 29,1	24,9	32,0	20,6	28,8	31,4			92. 41. 27,85				41. 25. 27,25			B.
	(b)* \mathcal{R} . 2 ^h . 56 ^m . 20 ^s .	2. 39,9	36,9	43,3	32,1	40,6	43,1		+3	162. 2. 38,88		41,5	39,7	110. 49. 43,59			B.
Dec. 6	(d) H. C. 43487.....	3. 22,0	16,7	25,1	11,9	21,0	23,1			111. 58. 20,08	29,400	42,6	35,0	60. 42. 40,75			B.
	(b)* \mathcal{R} . 22 ^h . 33 ^m . 1 ^s .	0. 30,0	26,8	33,0	21,9	30,1	32,9	14,391		113. 9. 2,08	29,402	41,5	34,5	61. 53. 24,22			B.
	(a)* \mathcal{R} . 22 ^h . 35 ^m . 52 ^s .	4. 45,0	39,7	48,1	34,2	45,1	47,0		+3	113. 9. 34,05				62. 3. 56,41			B.
	(b)* \mathcal{R} . 23 ^h . 8 ^m . 20 ^s .	2. 29,9	22,8	32,1	17,2	28,1	30,0		+3	117. 22. 27,37	29,404	39,8	33,8	66. 6. 54,99			B.
	* \mathcal{R} . 23 ^h . 14 ^m . 50 ^s .	4. 49,0	42,0	53,1	38,0	47,9	49,0		+1	117. 59. 46,74				66. 44. 15,19			B.
	B. 1. 228.....	4. 29,0	24,1	33,8	18,1	28,9	33,2	17,851		146. 36. 48,81	29,408	38,7	33,9	95. 22. 17,50			B.
	B. 1. 237.....	0. 59,7	54,0	63,6	50,0	60,1	62,7		+1	145. 50. 58,37				94. 36. 24,40			B.
	B.A.C. 490.....	2. 39,8	34,9	43,0	29,9	38,9	42,1		+1 $\frac{1}{2}$	129. 57. 38,25				78. 42. 25,25			B.
	i Persei R.....	3. 29,5	25,9	32,0	20,6	28,1	33,0	9,599		271. 58. 41,21		38,1	33,5	34. 51. 36,65			B.
	i Persei.....	2. 43,7	37,1	45,8	31,5	40,8	43,7		+1 $\frac{3}{4}$	86. 7. 41,18				34. 51. 33,82			B.
	θ Persei R.....	0. 34,0	30,1	36,5	25,1	33,4	37,1	12,067	+1 $\frac{3}{4}$	265. 24. 54,10			34,1	41. 25. 30,56			B.
	θ Persei.....	1. 28,2	21,0	30,9	16,1	26,1	29,1		+3	92. 41. 26,82				41. 25. 26,26			B.
Dec. 9	(e) B. 1. 988.....	0. 30,9	27,1	34,1	22,1	32,9	34,0		+3	130. 20. 30,46	30,048	42,1	40,5	79. 5. 19,87			B.
	i Persei R.....	3. 30,8	29,1	33,9	22,1	30,2	35,0	9,589		271. 58. 43,45				34. 51. 33,07			B.
	i Persei.....	2. 42,6	37,0	44,8	31,9	41,3	43,9		+1 $\frac{1}{2}$	86. 7. 40,85				34. 51. 34,79			B.
	θ Persei R.....	0. 33,0	30,1	35,7	25,2	33,9	37,7	11,970		265. 24. 56,09	30,066	41,7	41,1	41. 25. 27,28			B.
	θ Persei.....	1. 28,7	23,3	31,0	19,0	28,0	31,1		+1	92. 41. 27,09				41. 25. 27,88			B.
	(f) Polaris SP. R....	1. 50,6	48,9	53,1	43,0	49,9	53,9	15,654		308. 19. 56,63	30,186	39,9	38,0	-1. 30. 26,37			B.
	Polaris SP.....	1. 32,0	26,1	32,2	20,5	31,1	34,1			49. 46. 29,35				-1. 30. 22,97			B.
Dec. 10	(g) B. XXII. 772.....	0. 42,9	41,1	46,6	36,4	44,1	47,0			138. 10. 43,05	30,254	40,3	37,4	86. 55. 49,89			B.
	(h)* \mathcal{R} . 23 ^h . 8 ^m . 20 ^s .	2. 28,1	21,4	30,6	16,8	26,7	27,9		+3	117. 22. 25,95	30,250	39,9	36,1	66. 6. 55,64			B.
	(i) ι Piscium R.....	3. 43,1	40,9	45,3	35,1	44,4	47,0	9,067		221. 39. 6,80	30,244	39,7	36,4	85. 12. 18,63			B.
Dec. 11	ι Piscium.....	2. 17,3	14,9	21,4	9,8	19,1	22,4		+1 $\frac{3}{4}$	136. 27. 17,62				85. 12. 20,47			B.
	* \mathcal{R} . 2 ^h . 56 ^m . 20 ^s .	2. 36,9	34,6	40,1	29,0	39,1	40,3			162. 2. 36,78	29,876	41,1	40,5	110. 49. 45,61			B.
Dec. 12	(k) β Ceti R.....	0. 42,0	37,1	43,0	33,0	43,1	44,0	2,839		198. 3. 14,26	30,328	39,9	35,0	108. 50. 0,78			B.
	β Ceti.....	2. 67,1	63,9	72,0	58,9	70,9	72,9		+1 $\frac{1}{4}$	160. 3. 7,66				108. 50. 0,12			B.
	ϵ Piscium R.....	2. 11,7	6,4	13,0	1,7	10,7	14,1	1,950		223. 55. 2,09	30,338	39,7	34,6	82. 56. 18,77			B.
	ϵ Piscium.....	1. 20,1	15,8	22,2	11,1	21,0	24,0		+2	134. 11. 19,15				82. 56. 17,43			B.
	B. 1. 276.....	0. 66,6	63,1	70,0	58,0	67,1	70,8			143. 1. 5,98	30,336	39,2	34,3	91. 46. 26,78			B.
	θ Persei R.....	0. 26,1	20,2	27,9	16,7	23,9	29,9	11,490		265. 24. 57,61	30,346	37,0	32,5	41. 25. 25,86			B.
	θ Persei.....	1. 29,1	23,4	32,0	18,1	29,1	30,2			92. 41. 27,05				41. 25. 27,94			B.
	(l)* \mathcal{R} . 2 ^h . 56 ^m . 20 ^s .	2. 37,9	34,0	40,8	29,2	39,4	42,8	24,896	+3	162. 2. 31,89	30,346	36,4	32,3	110. 49. 47,13			B.
	Piazzi XXII. 169.	0. 52,9	51,9	57,0	46,0	56,0	57,1			137. 30. 53,43	30,318	38,1	34,8	86. 15. 59,18			B.
Dec. 13	B. XXII. 772.....	0. 43,1	41,9	47,1	35,9	45,0	46,5			138. 10. 43,22				86. 55. 50,59			B.
	α Persei R.....	4. 29,4	25,5	33,0	19,8	28,2	32,9	11,760		266. 8. 55,81	30,310	35,9	33,2	40. 41. 26,87			B.
	α Persei.....	2. 28,2	21,8	30,0	16,4	26,1	29,1			91. 57. 25,15				40. 41. 25,25			B.
	(l) τ^5 Eridani R.....	1. 25,3	20,8	27,3	14,2	25,0	27,1	0,816		194. 44. 39,29				112. 9. 15,05			B.
	τ^5 Eridani.....	1. 44,1	40,0	48,0	36,4	44,9	48,5		+1 $\frac{3}{4}$	163. 21. 43,38				112. 9. 15,14			B.
	ϵ Persei R.....	4. 20,0	15,4	24,1	11,0	19,4	23,7	10,639		256. 24. 9,99	30,308	35,9	33,1	50. 26. 23,32			B.
	(m) ϵ Persei.....	2. 14,2	8,2	18,0	2,7	12,9	14,9		+3	101. 42. 12,84				50. 26. 23,57			B.
	B. v. 324.....	3. 29,8	26,1	34,1	20,4	29,1	34,1	4,229		136. 0. 33,69	30,312	35,5	31,6	84. 45. 36,34			B.
	B. v. 356.....	4. 45,4	42,1	50,7	36,9	46,7	50,9		+1	136. 4. 45,24				84. 49. 48,04			B.
	* \mathcal{R} . 5 ^h . 26 ^m . 26 ^s .	3. 26,2	22,4	29,9	16,9	26,7	31,1		+2 $\frac{1}{2}$	134. 48. 25,49				83. 33. 25,45			B.
	α Orionis R.....	3. 31,6	27,8	33,1	21,4	31,9	34,8	9,839		224. 13. 37,88		35,3		82. 37. 42,65			B.
	α Orionis.....	2. 46,0	42,1	50,0	37,0	46,0	49,1		+1 $\frac{1}{2}$	133. 52. 44,94				82. 37. 42,89			B.
	1 Lyncis R.....	4. 29,0	25,2	31,7	19,9	26,4	32,2	13,322		278. 23. 22,52				28. 26. 46,95			B.
1 Lyncis.....	2. 63,0	59,1	67,4	51,2	62,0	64,6		+1 $\frac{1}{4}$	79. 43. 1,51				28. 26. 48,40			B.	
Dec. 15	36 Ceti.....	0. 30,0	26,3	33,1	20,0	32,3	33,5			148. 50. 29,18	29,728	42,2	41,4	97. 36. 7,15			B.

MICROMETER READING for COINCIDENCE with fixed Wire = 10', 174, 10', 194, 10', 216, 10', 226, 10', 245 at the five wires.
 From Dec. 9 = 10', 176, 10', 196, 10', 218, 10', 228, 10', 247. From Dec. 13 = 10', 178, 10', 198, 10', 220, 10', 230, 10', 249.
 ONE REVOLUTION = 20'', 850. CORRECTION for RUNS = +1'', 0. From Dec. 9 = +1'', 3. From Dec. 13 = -1'', 4. ZENITH POINT = 89°. 3'. 12'', 61. From Dec. 9 = 89°. 3'. 11'', 29. ASSUMED CO-LATITUDE = 37°. 47'. 8'', 28.

(a) Bisection doubtful from faintness. (b) Very faint. (c) The following small star not seen. (d) The following star seen. (e) Extremely faint from moon-light. No other star seen. (f) Unsatisfactory observation, the star being very badly defined. Times by M, 13^h. 6^m. 19^s and 13^h. 7^m. 20^s. M fast on H, 2^m. 19^s. (g) The N.P.D. of Bessel is 10'' and that of Lalande 17'' greater: perhaps the star has large proper motion. (h) Faint from cloud: bisection very doubtful. (i) Faint from cloud. (k) Very unsteady. (l) Faint. (m) Delayed by failure of the tangent-screw.

Month and Day.	NAME OF OBJECT.	Microscope Readings.						Microm. Reading.	Interval of Obs. from Middle Wire.	Concluded Circle reading.	Barom.	Thermom.		Apparent N.P.D. from the Observation.	Observer.
		A	B	C	D	E	F					Int.	Ext.		
		"	"	"	"	"	"					Inch.	°		
Dec. 15	B. I. 228.....	4. 31,0	27,1	35,3	21,9	33,1	36,0	17,949	+1	146. 36. 49,58	29,728	42,2	41,4	95. 22. 19,13	B.
	B. I. 237.....	0. 59,1	54,9	63,1	50,1	61,1	62,2		+2	145. 50. 58,42				94. 36. 25,32	B.
	B.A.C. 490.	2. 39,1	36,1	43,4	29,8	40,2	42,1		+1	129. 57. 38,36	29,730	42,1	41,2	78. 42. 26,45	B.
	<i>i</i> Persei R.	3. 30,1	28,1	33,2	22,4	31,0	35,3	9,614		271. 58. 42,49	29,734	42,0		34. 51. 34,06	B.
	(a) <i>i</i> Persei.....	2. 41,1	36,0	43,8	30,1	40,9	42,0			86. 7. 38,87				34. 51. 32,84	B.
Dec. 19	(b) α Camelopardi R.	0. 27,1	22,6	28,1	17,9	23,5	28,9	12,946		282. 54. 27,88	28,808	38,9	36,9	23. 55. 37,73	B.
	α Camelopardi....	1. 58,1	53,9	61,4	47,0	57,2	59,2			75. 11. 56,13				23. 55. 38,60	B.
	B. v. 324.....	0. 38,9	33,9	39,9	29,0	38,9	41,9		+2 $\frac{1}{2}$	136. 0. 37,17	28,800	38,9	37,0	84. 45. 35,57	B.
	(c) * \mathcal{R} . 5 ^h . 27 ^m . 4 ^s ...	0. 46,0	41,0	48,0	35,6	46,9	47,9		+1	134. 35. 44,24				83. 20. 39,68	B.
Dec. 23	(d) B. xxii. 1228.....	2. 31,9	28,0	35,2	23,2	32,8	35,2			140. 18. 31,03	29,414	40,2	40,9	89. 3. 40,44	B.
	(d) A Piscium.....	2. 18,9	16,9	22,8	10,2	21,1	23,1		-1	139. 57. 18,83				88. 42. 27,33	B.
	(e) B. v. 324.....	0. 36,1	31,9	29,4	26,9	37,0	40,0			136. 0. 33,55	29,700	39,0	38,4	84. 45. 33,69	B.
	(f) B. v. 623.....	0. 50,4	47,1	54,3	42,0	51,5	53,1			135. 10. 49,73				83. 55. 48,06	B.
Dec. 24	(g) 51 Andromedæ R.	1. 30,1	25,8	32,1	21,1	29,3	33,0	10,320		264. 41. 26,52	30,140	37,2	31,5	42. 8. 57,99	B.
	51 Andromedæ ...	4. 58,9	51,9	62,9	45,9	56,2	59,1		+2 $\frac{1}{4}$	93. 24. 56,64				42. 8. 58,01	B.
	B.A.C. 650.....	2. 40,1	32,9	43,1	28,0	38,6	40,9			123. 57. 37,25		36,9	30,9	72. 42. 16,60	B.
	(c) <i>i</i> Persei R.	3. 30,6	28,1	34,0	22,1	32,0	35,0	9,565		271. 58. 43,98				34. 51. 32,75	B.
	<i>i</i> Persei.....	2. 39,8	33,1	43,0	27,9	37,7	40,4		+1 $\frac{3}{4}$	86. 7. 37,63				34. 51. 31,22	B.
Dec. 30	(h) B. I. 228.....	4. 35,0	32,0	39,2	25,9	38,1	40,1	18,147	+2	146. 36. 49,97	29,708	46,9	47,4	95. 22. 18,68	B.
	B. I. 276.....	1. 11,0	8,9	15,0	3,1	13,6	16,0			143. 1. 11,22				91. 46. 28,45	B.
	τ^1 Eridani.....	1. 57,9	55,0	61,1	49,0	60,2	62,0			160. 26. 57,47	29,800	46,5	46,3	109. 13. 46,98	B.
	(i) * \mathcal{R} . 2 ^h . 56 ^m . 14 ^s ...	0. 30,7	27,2	33,1	22,1	33,9	33,9		+3	161. 25. 30,63	29,812	46,4	45,4	110. 12. 30,54	B.
	α Persei R.	4. 25,9	21,1	27,8	16,8	25,0	30,6	11,480	+2	266. 8. 57,72				40. 41. 24,47	B.
	α Persei.....	2. 19,2	11,2	20,0	7,0	18,0	20,1		+4 $\frac{1}{4}$	91. 57. 17,68				40. 41. 18,01	B.
	B.A.C. 1275.....	1. 10,5	6,1	13,1	1,1	10,1	12,2			128. 16. 8,82	29,856	45,3	44,1	77. 0. 54,22	B.
	B. v. 324.....	3. 37,8	32,1	40,2	27,2	38,7	41,8	4,541	+1	136. 0. 34,50	29,896	44,3	42,1	84. 45. 35,21	B.
	B. v. 399.....	1. 51,5	47,9	53,8	41,6	53,0	54,5		+2	137. 11. 50,36				85. 56. 53,75	B.
	(k) * \mathcal{R} . 5 ^h . 27 ^m . 4 ^s ...	2. 34,3	29,1	36,1	23,9	35,1	37,1	1,140	+1	134. 35. 41,78	29,900	44,0	41,8	83. 20. 39,48	B.
	ϵ Orionis.....	2. 69,1	64,2	73,0	58,7	70,9	72,5			142. 33. 7,95				91. 18. 25,26	B.
	H. C. 11457.....	2. 29,1	25,1	33,0	19,3	30,2	32,9	15,041	+2	132. 5. 48,07	29,930	43,6	41,1	80. 50. 40,87	B.
	H. C. 11496.....	1. 71,0	63,0	71,9	59,0	69,0	71,1		+1	95. 42. 7,58				44. 26. 11,86	B.
	γ Geminorum R..	2. 33,0	28,3	33,5	22,1	33,7	35,9	10,560		233. 22. 23,62	29,948	43,1	39,9	73. 28. 38,38	B.
	γ Geminorum.....	3. 57,6	51,0	61,0	45,7	58,2	58,3		+1 $\frac{1}{2}$	124. 43. 55,25				73. 28. 35,39	B.

MICROMETER READING for COINCIDENCE with Fixed Wire = 10',178, 10',198, 10',220, 10',230, 10',249 at the five wires. From Dec. 19 = 10',180, 10',200, 10',222, 10',232, 10',251. From Dec. 30 = 10',164, 10',184, 10',206, 10',216, 10',235. ONE REVOLUTION = 20'',850. CORRECTION for RUNS = -1'',4. From Dec. 19 = -0'',1. From Dec. 30 = -1'',1. ZENITH POINT = 89°. 3'. 11'',29. From Dec. 19 = 89°. 3'. 11'',57. From Dec. 30 = 89°. 3'. 10'',93. ASSUMED Co-LATITUDE = 37°. 47'. 8'',28.

(a) Bisection not satisfactory. (b) Faint from light clouds: the wind was very high this night. (c) Faint. (d) Obscured by clouds. (e) Faint from cloud: no other star seen. (f) Very faint: no companion seen. (g) Wires too close. (h) Clouds continually obscuring. (i) Another north-follows. The observation was delayed by clouds. (k) Very faint.

MEAN NORTH POLAR DISTANCES OF STARS

OBSERVED IN THE YEAR 1845,

AS DEDUCED FROM EACH DAY'S OBSERVATION,

WITH

A CATALOGUE

OF THE

CONCLUDED MEAN NORTH POLAR DISTANCES,

JANUARY 1, 1845,

CORRECTED FOR DISCORDANCE OF ZENITH POINTS, AND
FOR ALTERATION OF CO-LATITUDE.

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.
	"	0 . . "		"	0 . . "		"	0 . . "		"	0 . . "
α Andromedæ.			ϕ^3 Ceti.			32 Ceti.			ξ Andromedæ.		
Oct. 9	+29,90	61.45.51,97	Sept. 27	+26,63	102.6.26,14	Oct. 9	+25,62	99.43.52,25	Sept. 27	+20,05	45.17.6,20
13	+30,50	52,19	30	+26,55	25,77	10	+25,53	51,96			
Nov. 3	+33,09	52,16	\ast \mathcal{R} . 0 ^h . 49 ^m . 50 ^s .			14	+25,24	54,09	ξ Andromedæ R.		
4	+33,18	53,95	Sept. 27	+26,70	103.5.4,69	21	+24,65	54,06	Sept. 27	+20,05	45.17.6,78
14	+33,94	52,31	30	+26,51	6,75	24	+24,36	53,77			
22	+34,30	57,43	Oct. 3	+26,30	5,52	25	+24,28	53,20			
α Andromedæ R.			Nov. 3	+23,17	5,66	Polaris.			B. i. 223.		
Oct. 9	+29,90	61.45.56,24	ϕ^4 Ceti.			Feb. 21	+21,01	1.31.1,52	Oct. 9	+25,28	94.15.3,15
13	+30,50	56,45	Oct. 3	+26,29	102.13.3,55	Sept. 30	+15,51	2,12	Nov. 3	+23,77	4,20
Nov. 3	+33,09	56,62	7	+25,99	3,39	Nov. 25	+35,21	3,25	19	+22,37	3,72
4	+33,18	54,60	9	+25,84	2,73	Polaris R.			20	+22,27	3,81
14	+33,94	52,87	24	+24,43	4,49	Feb. 21	+21,01	1.31.1,92	22	+22,09	1,72
22	+34,30	54,37	Nov. 14	+22,00	3,17	Sept. 30	+15,51	0,61	B. i. 228.		
Σ 8.			B. o. 962.			Nov. 25	+35,21	1,10	Oct. 3	+25,46	95.22.36,63
Sept. 17	+27,74	93.56.23,79	Oct. 7	+25,93	101.29.54,33	Polaris SP.			24	+24,36	39,54
18	+27,76	24,48	9	+25,78	54,80	Apr. 1	+9,76	1.30.59,91	25	+24,29	36,48
27	+27,83	22,48	14	+25,37	57,03	24	+2,76	60,91	Dec. 6	+20,40	37,90
α Cassiopeiæ.			ϵ Piscium.			May 9	-1,19	60,42	15	+19,51	38,64
Sept. 27	+22,78	34.18.48,33	Nov. 4	+26,55	82.56.43,61	Dec. 9	+38,86	61,83	30	+18,16	36,84
Oct. 3	+24,64	48,15	Dec. 12	+22,57	40,00	Polaris SP. R.			B. i. 237.		
7	+25,88	49,20	ϵ Piscium R.			Apr. 1	+9,76	1.31.2,38	Oct. 7	+25,30	94.36.44,79
9	+26,48	47,98	Nov. 4	+26,55	82.56.43,88	24	+2,76	3,80	25	+24,35	42,67
14	+27,93	47,67	Dec. 12	+22,57	41,34	May 9	-1,19	3,39	Nov. 14	+22,71	43,26
Nov. 4	+33,40	48,05	\ast \mathcal{R} . 0 ^h . 58 ^m . 10 ^s .			Dec. 9	+38,86	5,23	Dec. 5	+20,69	44,44
14	+35,49	48,05	Sept. 27	+26,39	99.29.24,31	B. i. 51.			6	+20,61	45,01
α Cassiopeiæ R.			Oct. 14	+25,41	20,72	Oct. 3	+25,92	98.45.13,52	15	+19,74	45,06
Sept. 27	+22,78	34.18.48,63	20	+24,92	25,67	7	+25,71	12,47	H. C. 2553.		
Oct. 3	+24,64	48,50	Nov. 17	+22,05	28,04	Nov. 3	+23,47	14,70	Nov. 4	+23,70	93.16.58,75
7	+25,88	48,37	19	+21,83	25,12	4	+23,39	15,24	18	+22,53	58,09
9	+26,48	48,86	B. o. 1051.			19	+21,77	14,52	20	+22,35	56,91
14	+27,93	49,41	Oct. 24	+24,55	99.31.30,63	20	+21,67	12,98	22	+22,17	55,88
Nov. 4	+33,40	48,23	28 Ceti.			36 Ceti.			B. i. 276.		
14	+35,49	46,88	Sept. 27	+26,43	100.40.13,81	Oct. 9	+25,58	97.36.23,64	Oct. 9	+25,13	91.46.46,05
β Ceti.			Oct. 7	+25,84	12,52	25	+24,44	23,02	14	+25,00	48,45
Oct. 13	+25,12	108.50.16,71	9	+25,71	13,14	Nov. 14	+22,53	24,20	Dec. 12	+20,78	47,56
Dec. 12	+17,32	17,44	10	+25,63	15,06	Dec. 15	+19,32	26,47	30	+19,26	47,71
β Ceti R.			η Ceti.			37 Ceti.			B. i. 497.		
Oct. 13	+25,12	108.50.19,98	Oct. 3	+26,02	101.0.13,90	Oct. 7	+25,61	98.45.23,76	Oct. 3	+24,33	87.0.25,80
Dec. 12	+17,32	18,10	20	+24,66	18,26	14	+25,15	25,83	14	+24,40	27,03
γ Cassiopeiæ.			21	+24,56	19,81	20	+24,67	25,53	20	+24,33	27,13
Oct. 20	+27,84	30.7.26,44	B. i. 186.			21	+24,59	25,25	23	+24,27	27,08
γ Cassiopeiæ R.			Oct. 14	+25,06	96.8.34,67	24	+24,33	26,88	24	+24,27	28,91
Oct. 20	+27,84	30.7.26,26	20	+24,70	36,25	51 Andromedæ.			B. i. 186.		
						Sept. 27	+17,88	42.9.32,78	Oct. 29	+25,89	33,88
						Oct. 29	+25,89	33,88	Dec. 24	+34,01	32,02
						Dec. 24	+34,01	32,02			

Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.
"	"	0 " "	"	"	0 " "	"	"	0 " "	"	"	0 " "
51 Andromedæ R.			B.A.C. 609.			i Persei R.			γ Ceti R.		
Sept. 27	+ 17,88	42. 9. 34,52	Oct. 11	+ 22,43	78. 27. 33,55	Jan. 13	+ 17,89	34. 52. 4,13	Oct. 25	+ 19,35	87. 25. 13,56
Oct. 29	+ 25,89	37,55	13	+ 22,51	33,46	Oct. 10	+ 14,87	3,22	38 Arietis.		
Dec. 24	+ 34,01	32,00	14	+ 22,56	34,28	16	+ 16,51	5,18	Jan. 13 + 3,41 78. 12. 36,02		
B.A.C. 490.			20	+ 22,79	34,48	25	+ 18,91	3,75	τ ¹ Eridani.		
Nov. 20	+ 24,65	78. 42. 48,71	21	+ 22,83	34,94	31	+ 20,48	2,75	Dec. 30 + 7,74 109. 13. 54,72		
22	+ 24,61	49,24	23	+ 22,88	33,44	Nov. 3	+ 21,25	2,79	α Ceti.		
27	+ 24,49	50,12	α Piscium.			17	+ 24,62	5,10	Oct. 31 + 17,45 86. 31. 15,19		
Dec. 1	+ 24,36	50,50	Nov. 4	+ 22,07	87. 59. 15,72	18	+ 24,84	3,23	Nov. 10 + 16,85 17,52		
6	+ 24,17	49,42	γ Andromedæ.			22	+ 25,74	2,80	α Ceti R.		
15	+ 23,76	50,21	Oct. 29	+ 22,90	48. 25. 0,22	Dec. 6	+ 27,97	4,62	Oct. 31 + 17,45 86. 31. 20,06		
B. r. 568.			γ Andromedæ R.			9	+ 28,97	2,04	Nov. 10 + 16,85 18,15		
Sept. 30	+ 23,94	85. 51. 51,16	Oct. 29	+ 22,90	48. 25. 1,57	15	+ 29,88	3,94	* R. 2 ^h . 56 ^m . 14 ^s .		
Oct. 20	+ 24,15	48,97	B. r. 988.			24	+ 30,99	3,74	Dec. 30 + 5,97 110. 12. 36,51		
21	+ 24,15	52,04	Sept. 30	+ 21,55	79. 5. 40,08	δ Ceti.			* R. 2 ^h . 56 ^m . 20 ^s .		
23	+ 24,10	49,67	Oct. 31	+ 22,66	38,36	Oct. 11	+ 20,36	90. 20. 34,86	Dec. 5 + 10,24 110. 49. 53,83		
24	+ 24,10	52,38	Nov. 3	+ 22,69	38,38	13	+ 20,31	36,68	11 + 9,09 54,70		
B. r. 576.			18	+ 22,54	41,35	31	+ 19,38	32,57	12 + 8,90 56,03		
Oct. 3	+ 23,85	83. 41. 59,50	Dec. 9	+ 21,85	41,72	δ Ceti R.			α Persei.		
11	+ 24,08	57,83	B.A.C. 632.			Oct. 31	+ 19,38	90. 20. 37,23	Jan. 13 + 12,84 40. 41. 44,11		
24	+ 24,17	59,27	Sept. 30	+ 21,55	79. 5. 40,08	* R. 2 ^h . 31 ^m . 26 ^s .			Mar. 3 + 11,31 45,64		
25	+ 24,16	58,75	Oct. 31	+ 22,66	38,36	Oct. 11	+ 18,40	73. 59. 19,68	Apr. 5 + 6,22 45,58		
Nov. 3	+ 24,04	59,35	Nov. 3	+ 22,69	38,38	θ Persei.			Oct. 25 + 10,51 44,02		
B.A.C. 549.			18	+ 22,54	41,35	Oct. 9	+ 12,78	41. 25. 50,39	31 + 11,77 42,88		
Nov. 4	+ 24,38	73. 45. 15,50	Dec. 9	+ 21,85	41,72	20	+ 15,31	52,97	Nov. 20 + 15,91 43,97		
18	+ 24,70	15,07	B.A.C. 632.			21	+ 15,55	52,02	Dec. 1 + 17,92 43,44		
19	+ 24,70	15,63	Nov. 25	+ 23,65	72. 29. 39,87	Nov. 3	+ 18,44	53,10	13 + 19,90 45,15		
B. r. 736.			* R. 1 ^h . 57 ^m . 25 ^s .			4	+ 18,67	53,49	30 + 22,14 (40,15)		
Sept. 27	+ 22,95	83. 5. 22,81	Oct. 14	+ 22,07	78. 50. 23,70	10	+ 19,94	52,65	α Persei R.		
Oct. 11	+ 23,50	22,18	20	+ 22,26	26,92	18	+ 21,56	52,79	Jan. 13 + 12,84 40. 41. 43,48		
14	+ 23,55	21,90	Nov. 19	+ 22,34	35,23	22	+ 22,33	54,02	Mar. 3 + 11,31 41,36		
21	+ 23,63	22,33	20	+ 22,32	8,46	Dec. 5	+ 24,56	51,81	Apr. 5 + 6,22 44,35		
23	+ 23,63	22,83	B.A.C. 650.			6	+ 24,71	50,97	Oct. 25 + 10,51 42,77		
1 Arietis.			Nov. 4	+ 22,70	72. 42. 41,03	9	+ 25,15	53,03	31 + 11,77 42,88		
Sept. 30	+ 21,28	68. 29. 47,43	Dec. 24	+ 22,66	39,26	12	+ 25,58	53,52	Nov. 20 + 15,91 43,97		
γ Arietis. s.			i Persei.			θ Persei R.			Dec. 1 + 17,92 43,44		
Oct. 23	+ 23,49	71. 28. 4,59	Jan. 13	+ 17,89	34. 52. 3,26	Oct. 9	+ 12,78	41. 25. 55,62	13 + 19,90 45,15		
25	+ 23,62	1,89	Oct. 10	+ 14,87	1,22	20	+ 15,31	51,99	30 + 22,14 (40,15)		
γ Arietis. n.			16	+ 16,51	4,03	21	+ 15,55	53,15	α Persei R.		
Oct. 23	+ 23,49	71. 27. 53,76	25	+ 18,91	2,92	Nov. 3	+ 18,44	51,26	Jan. 13 + 12,84 40. 41. 43,48		
25	+ 23,62	53,52	31	+ 20,48	1,80	4	+ 18,67	52,87	Mar. 3 + 11,31 41,36		
			Nov. 3	+ 21,25	3,85	10	+ 19,94	50,55	Apr. 5 + 6,22 44,35		
			17	+ 24,62	2,78	18	+ 21,56	53,31	Oct. 25 + 10,51 42,77		
			18	+ 24,84	2,60	22	+ 22,33	50,71	31 + 11,77 42,88		
			22	+ 25,74	3,90	Dec. 5	+ 24,56	52,42	Nov. 20 + 15,91 43,97		
			Dec. 6	+ 27,97	1,79	6	+ 24,71	55,27	Dec. 1 + 17,92 43,44		
			9	+ 28,97	3,76	9	+ 25,15	52,43	13 + 19,90 45,15		
			15	+ 29,88	2,72	12	+ 25,58	51,44	30 + 22,14 46,61		
			24	+ 30,99	2,21	γ Ceti.			ε Eridani.		
						Oct. 25	+ 19,35	87. 25. 12,85	Jan. 1 - 3,90 99. 59. 10,30		

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.
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τ^s Eridani.			Aldebaran R.			B. v. 324.			ζ Tauri.		
Dec. 13	+6,30	112. 9.21,44	Jan. 21	-0,78	73.48.26,80	Mar. 4	-8,28	84.45.32,85	Jan. 24	-3,06	68.57.27,30
τ^s Eridani R.			Mar. 4	-2,26	27,65	7	-8,37	34,03	125 Tauri.		
			α Camelopardi.			Dec. 13	-1,12	35,22			
Dec. 13	+6,30	112. 9.21,35				19	-1,77	33,80	Jan. 13	-2,23	64.11.44,60
δ Persei.			Feb. 28	+13,62	23.55.49,84	23	-2,21	31,48	B. v. 925.		
			Dec. 19	+7,97	46,57	B. v. 356.					
Nov. 20	+13,11	42.42.48,19	α Camelopardi R.			Dec. 13	-1,13	84.49.46,91	Jan. 13	-5,88	82.38.50,76
Dec. 1	+15,03	48,12	Feb. 28	+13,62	23.55.46,31	β Tauri.			Mar. 3	-8,48	50,65
δ Persei R.			Dec. 19	+7,97	45,70				B. v. 1015.		
			ϵ Aurigæ.			Mar. 29	-0,89	61.31.44,71	Jan. 13	-5,95	82. 6. 1,03
Nov. 20	+13,11	42.42.49,30	Jan. 21	+4,96	46.24.45,63	β Tauri R.			24	-6,75	1,09
Dec. 1	+15,03	51,46	Mar. 14	+5,84	45,68				Feb. 21	-8,17	1,05
ϵ Persei.			ϵ Aurigæ R.			Mar. 29	-0,89	61.31.48,66	δ Aurigæ.		
Nov. 20	+10,85	50.26.36,90	Jan. 21	+4,96	46.24.46,99	B. v. 399.			Jan. 13	+0,98	35.44. 8,27
Dec. 13	+13,69	37,26	Mar. 14	+5,84	46,18	Dec. 30	-3,27	85.56.50,48	21	+2,31	8,97
ϵ Persei R.			η Aurigæ.			B. v. 623.			α Orionis.		
Nov. 20	+10,85	50.26.36,72	Mar. 4	+5,15	48.58.54,30	Jan. 13	-5,64	83.55.50,38	Mar. 3	-8,98	82.37.37,42
Dec. 13	+13,69	37,01	η Aurigæ R.			Dec. 23	-3,30	44,76	7	-9,06	38,03
λ Tauri.			Mar. 4	+5,15	48.58.53,93	Σ 734.			Dec. 13	-4,76	38,13
Jan. 1	+0,75	77.57. 7,79	Capella.			Feb. 17	-9,35	91.49.58,51	α Orionis R.		
Feb. 28	-2,08	6,26	Feb. 17	+6,06	44. 9.58,31	α Leporis.			Mar. 3	-8,98	82.37.36,71
B.A.C. 1275.			28	+6,26	60,30	Jan. 21	-11,26	107.56.15,93	7	-9,06	36,59
Dec. 30	+7,84	77. 1. 2,06	Mar. 7	+6,18	60,12	$\star \mathcal{R}. 5^h.26^m.26^s.$			Dec. 13	-4,76	37,89
Σ 520.			Apr. 22	+2,45	60,12	Feb. 28	-8,28	83.33.23,84	B. v. 1338.		
Nov. 20	+8,17	67.34.38,34	Capella R.			Mar. 3	-8,35	24,18	Mar. 4	-8,63	80.53.30,02
γ Tauri.			Feb. 17	+6,06	44. 9.61,96	4	-8,38	20,71	7	-8,73	32,13
			28	+6,26	59,99	7	-8,46	23,81	B. v. 1359.		
Mar. 3	-1,87	74.45. 7,72	Apr. 22	+2,45	58,98	Dec. 13	-2,41	23,04	Feb. 28	-8,63	80.56.19,62
γ Tauri R.			B. v. 294.			$\star \mathcal{R}. 5^h.27.4^s.$			Mar. 11	-8,85	19,76
Mar. 3	-1,87	74.45. 5,83	Jan. 24	-6,41	85.40.59,07	Dec. 19	-3,08	83.20.36,60	H. C. 11457.		
Aldebaran.			Feb. 28	-8,35	58,76	30	-4,25	35,23	Dec. 30	-7,40	80.50.33,47
Jan. 21	-0,78	73.48.28,19	Mar. 3	-8,45	59,20	ϵ Orionis.			H. C. 11496.		
Mar. 4	-2,26	23,86	B. v. 303.			Feb. 21	-10,54	91.18.20,49	Dec. 30	-5,45	44.26. 6,41
			Jan. 21	-6,28	86. 8.51,83	Dec. 30	-5,13	20,13	Σ 840.		
									Jan. 24	-7,00	79.14.26,36

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.
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1 Lyncis.			ζ Geminorum.			Pollux R.			B.A.C. 2822.		
Feb. 21	+ 6,80	28.26.38,72	Mar. 11	- 7,77	69.12.27,62	Feb. 24	- 8,13	61.36.17,75	Apr. 2	- 14,96	81.56.4,56
Dec. 13	- 9,28	39,12	20	- 7,63	27,48	Mar. 6	- 7,77	14,89	B. VIII. 644.		
1 Lyncis R.			ζ Geminorum R.			11	- 7,47	17,23	Mar. 31	- 14,08	78.12.30,09
Feb. 21	+ 6,80	28.26.37,77	Mar. 11	- 7,77	69.12.27,23	φ Geminorum.			Apr. 2	- 14,03	29,55
Dec. 13	- 9,28	37,67	20	- 7,63	28,26	Jan. 7	- 10,88	62.50.15,50	3	- 14,00	31,07
η Geminorum.			δ Geminorum.			24	- 10,55	17,11	B.A.C. 2872.		
Feb. 21	- 4,80	67.27.12,49	Feb. 24	- 8,49	67.44.14,59	Σ 1200.			Apr. 3	- 13,37	76.12.58,29
β Canis Majoris.			δ Geminorum R.			Mar. 11	- 2,93	39.45.49,39	* R. 8 ^h .29 ^m .49 ^s .		
Feb. 28	- 17,31	107.52.59,22	Feb. 24	- 8,49	67.44.16,30	β Cancri.			Apr. 2	- 13,66	76.31.39,10
Mar. 5	- 17,70	60,41	ε Canis Minoris.			Jan. 24	- 12,54	80.20.29,35	Piazzi VIII. 131.		
11	- 18,04	60,61	Jan. 7	- 9,23	80.25.22,54	Mar. 12	- 14,33	29,50	Mar. 13	- 4,74	40.35.6,25
β Canis Majoris R.			24	- 10,67	24,37	13	- 14,33	29,76	H. C. 17139.		
Feb. 28	- 17,31	107.52.58,86	Castor.			β Cancri R.			Mar. 28	- 12,84	72.59.56,41
Mar. 5	- 17,70	60,57	Mar. 13	- 5,53	57.46.39,25	Jan. 24	- 12,54	80.20.27,19	Apr. 3	- 12,61	55,03
11	- 18,04	59,42	Castor R.			Mar. 12	- 14,33	27,05	A ¹ Cancri.		
15 Geminorum.			Mar. 13	- 5,53	57.46.39,02	13	- 14,33	25,29	Mar. 31	- 13,90	76.45.59,40
Jan. 13	- 6,06	69.7.16,95	υ Geminorum.			B. VIII. 228.			Apr. 4	- 13,76	59,40
Feb. 17	- 6,05	15,81	Jan. 7	- 9,84	62.45.52,63	Apr. 4	- 15,80	85.18.28,11	η Hydræ.		
γ Geminorum.			Feb. 28	- 7,81	53,92	21 Cancri.			Apr. 8	- 16,71	86.2.55,95
Feb. 21	- 7,88	73.28.26,26	Procyon.			Apr. 2	- 13,90	78.52.21,94	B.A.C. 3017.		
28	- 7,90	26,90	Jan. 24	- 11,57	84.22.55,20	3	- 13,88	22,37	Mar. 29	- 12,08	69.27.4,04
Dec. 30	- 11,28	24,11	Mar. 1	- 13,96	55,58	ο Ursæ Majoris.			31	- 11,98	2,26
γ Geminorum R.			7	- 14,15	54,35	Jan. 24	- 10,82	28.46.14,50	Apr. 2	- 11,88	4,32
Feb. 21	- 7,88	73.28.26,54	31	- 14,50	52,99	Mar. 8	- 1,52	13,47	3	- 11,82	2,62
28	- 7,90	24,61	Apr. 2	- 14,49	54,49	14	- 0,45	14,64	* R. 8 ^h .45 ^m .8 ^s .		
Dec. 30	- 11,28	27,10	Procyon R.			26	+ 1,29	15,59	Mar. 31	- 11,91	69.11.10,13
Sirius.			Jan. 24	- 11,57	84.22.53,98	28	+ 1,53	15,56	Apr. 2	- 11,80	10,39
Mar. 31	- 19,24	106.30.25,02	Mar. 1	- 13,96	55,14	ο Ursæ Majoris R.			3	- 11,75	11,51
Apr. 5	- 19,17	25,39	7	- 14,15	53,89	Jan. 24	- 10,82	28.46.11,67	ρ ³ Cancri.		
7	- 19,13	26,05	31	- 14,50	55,77	Mar. 8	- 1,52	12,43	Mar. 8	- 11,33	61.29.6,48
Sirius R.			Apr. 2	- 14,49	55,22	14	- 0,45	13,24	12	- 11,01	5,76
Mar. 31	- 19,24	106.30.26,28	Pollux.			26	+ 1,29	11,52	ο ² Cancri.		
Apr. 5	- 19,17	26,86	Feb. 24	- 8,13	61.36.15,87	28	+ 1,53	10,57	Mar. 8	- 14,28	73.49.37,81
7	- 19,13	25,71	Mar. 6	- 7,77	16,53	B. VIII. 466.					
ω Geminorum.			11	- 7,47	16,21	Apr. 4	- 16,73	87.23.50,01			
Jan. 7	- 7,84	65.34.8,36									
Feb. 24	- 6,84	8,61									

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.
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66 Cancr.			B. ix. 627.			Σ 1396.			48 Leonis.		
Mar. 8	-10,80	57. 8.45,10	Mar. 26	-17,71	84.47.42,35	Mar. 8	-17,02	78.36. 6,40	Apr. 21	-17,05	82.15. 0,30
			29	-17,70	41,35				23	-16,96	1,20
σ^2 Ursæ Majoris.			31	-17,68	40,77	B.A.C. 3398.			42 Leonis Minoris.		
Mar. 12	-2,48	22.14.34,03	Apr. 2	-17,65	40,78	Mar. 8	-17,25	80.20. 6,63			
			3	-17,64	42,51	17	-17,22	6,47	Mar. 8	-16,06	58.30. 9,92
Σ 1324.			2 Sextantis.			Σ 1404.			42 Leonis Minoris R.		
Mar. 20	-11,72	63.11.13,29	Apr. 2	-17,66	84.39.12,92				Mar. 8	-16,06	58.30. 9,44
Apr. 5	-10,39	11,93	3	-17,64	12,54	Mar. 17	-19,12	90.56.34,86			
Σ 1332.			Σ_2 205.			20	-19,23	36,95	40 Sextantis.		
Apr. 4	-11,38	65.42. 1,71	Mar. 17	-9,79	48.19.15,52	Regulus.			Apr. 21	-20,12	93.12.21,57
Σ 3121.			ϵ Leonis.			Mar. 29	-16,45	77.16.38,80	α Ursæ Majoris.		
Apr. 14	-9,05	60.46.21,50	Feb. 26	-15,28	65.30.52,44	Apr. 3	-16,23	36,87	Mar. 29	-7,69	27.24.49,64
B. ix. 176.			ϵ Leonis R.			Regulus R.			Apr. 3	-6,46	48,41
Mar. 28	-19,62	93.45.38,93	Feb. 26	-15,28	65.30.53,87	Mar. 29	-16,45	77.16.38,11	5	-5,98	50,19
31	-19,70	35,81	ν Ursæ Majoris.			Apr. 3	-16,23	39,18	α Ursæ Majoris R.		
Apr. 2	-19,74	37,14	Jan. 24	-17,83	30.14. 9,01	B.A.C. 3476.			Mar. 29	-7,69	27.24.47,26
3	-19,77	38,72	ν Ursæ Majoris R.			Mar. 17	-19,89	96.33.17,25	Apr. 3	-6,46	48,35
83 Cancr.			Jan. 24	-17,83	30.14. 4,52	20	-20,11	17,33	5	-5,98	(44,05)
Mar. 8	-14,65	71.38.26,81	ϕ Ursæ Majoris.			Σ_2 213.			Σ 1507.		
12	-14,48	26,68	Mar. 12	-8,37	35.12.52,79	Mar. 20	-13,85	61.48.39,98	Mar. 28	-18,20	82. 7.40,27
B. ix. 298.			17	-7,32	53,38	Apr. 5	-12,06	40,61	Apr. 21	-17,16	41,20
Mar. 31	-19,36	92. 8.11,20	26	-5,52	55,42	λ Ursæ Majoris.			May 5	-16,32	40,63
Apr. 2	-19,40	11,80	B. ix. 929.			Apr. 2	-8,43	46.18.49,21	B. x. 1053.		
3	-19,41	11,92	Mar. 31	-15,45	75. 9.32,44	23	-5,35	50,37	Mar. 28	-18,19	82. 1.35,67
Λ Hydræ.			Apr. 2	-15,34	31,87	λ Ursæ Majoris R.			B.A.C. 3831.		
Mar. 26	-19,82	94.27. 3,81	3	-15,29	33,74	Apr. 2	-8,43	46.18.50,30	Mar. 20	-16,92	69. 1.23,18
31	-19,98	7,18	23 Leonis.			23	-5,35	49,64	24	-16,46	22,95
α Hydræ.			Mar. 29	-15,81	76.12.41,32	B.A.C. 3506.			Apr. 21	-13,63	23,56
Mar. 8	-19,22	97.59.22,43	H. C. 19371.			Mar. 24	-15,65	71.29.25,47	p^5 Leonis.		
20	-20,26	22,44	Apr. 3	-15,18	74.32. 6,93	γ Leonis.			Mar. 28	-19,16	89.13.37,78
Apr. 5	-21,04	21,43	Σ 1397.			Mar. 8	-16,41	69.22.34,61	29	-19,18	36,85
α Hydræ R.			Apr. 5	-12,21	64.12.42,78	11	-16,24	35,99	δ Leonis.		
Mar. 8	-19,22	97.59.22,44	44 Leonis.			20	-15,59	34,08	Mar. 17	-17,11	68.37.40,20
20	-20,26	22,35	Apr. 21	-16,42	80.25.46,12	δ Leonis R.					
Apr. 5	-21,04	22,58				Mar. 17	-17,11	68.37.39,92			

Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observation.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.
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Piazzì XI. 27.			* \mathcal{R} . 11 ^h . 38 ^m . 50 ^s .			c Virginis.			ε Ursæ Majoris R.		
Mar. 29	- 12,19	46.50. 5,92	Mar. 29	- 18,30	83.15. 36,00	Apr. 19	- 17,47	85.49. 25,82	Apr. 2	- 13,21	33.11. 51,64
Apr. 3	- 11,18	9,26	May 5	- 16,39	32,30	22	- 17,31	25,42	19	- 8,49	50,36
ξ Ursæ Majoris.			Σ 1576.			Σ 1634.			May 9	- 3,36	48,96
Mar. 20	- 15,85	57.35. 56,06	Mar. 17	- 17,17	58.18. 40,55	May 3	- 11,81	66.13. 26,31	22	- 0,61	51,88
24	- 15,25	57,01	Piazzì XI. 181.			H. C. 23136.			Σ 1699.		
Apr. 21	- 10,93	56,42	Mar. 28	- 12,92	40.12. 3,04	May 3	- 11,27	64. 6. 48,23	May 14	- 8,85	61.40. 55,58
Σ 1530.			29	- 12,68	0,93	H. C. 23132.			k Virginis.		
Mar. 28	- 19,89	96. 3. 5,63	Apr. 3	- 11,50	1,19	Apr. 24	- 12,65	64. 8. 29,32	Apr. 16	- 17,44	92.58. 27,17
ι Leonis.			* \mathcal{R} . 11 ^h . 52 ^m . 28 ^s .			May 17	- 9,29	27,78	19	- 17,40	27,86
Mar. 17	- 18,17	78.37. 3,83	Apr. 3	- 11,62	39.33. 12,18	δ Corvi.			α Comæ.		
e Leonis.			o Virginis.			May 5	- 20,65	105.39. 4,82	Apr. 16	- 15,07	71.38. 56,45
Apr. 22	- 19,46	92. 8. 56,55	May 5	- 14,51	80.24. 20,53	9	- 20,73	7,06	May 2	- 12,87	53,56
26	- 19,37	56,67	o Virginis R.			δ Corvi R.			Σ 1727.		
May 3	- 19,19	53,78	May 5	- 14,51	80.24. 21,29	May 5	- 20,65	105.39. 5,72	May 14	- 7,88	57.48. 8,87
Σ 1558.			Σ 1604.			9	- 20,73	5,17	B. XIII. 113.		
May 5	- 11,86	67.40. 15,48	May 9	- 20,43	100.59. 12,46	B.A.C. 4218.			Apr. 7	- 16,90	97.14. 9,69
ν Leonis.			10 Virginis.			Apr. 24	- 15,80	79.25. 29,28	22	- 17,16	9,08
Mar. 17	- 18,75	89.58. 6,39	Apr. 19	- 17,88	87.13. 53,88	May 14	- 13,91	28,39	Σ 1733.		
ν Leonis R.			22	- 17,76	52,88	B.A.C. 4254.			May 3	- 12,71	71.55. 21,79
Mar. 17	- 18,75	89.58. 4,93	Σ 1619.			Apr. 2	- 17,83	87.17. 26,81	22	- 10,04	22,30
Σ 1564.			Apr. 19	- 19,29	96.23. 34,83	24	- 17,07	29,16	* \mathcal{R} . 13 ^h . 10 ^m . 1 ^s .		
Mar. 20	- 16,75	62.11. 5,51	δ Ursæ Majoris.			B.A.C. 4255.			Apr. 2	- 13,89	30.58. 37,70
χ Ursæ Majoris.			Mar. 17	- 15,63	32. 6. 21,24	Apr. 7	- 18,13	93.31. 12,83	* \mathcal{R} . 13 ^h . 10 ^m . 22 ^s .		
20	- 14,50	40,69	20	- 14,83	20,16	19	- 18,16	12,83	May 2	- 12,84	71.53. 2,60
Apr. 3	- 11,25	39,93	May 5	- 3,07	22,46	Σ 1678.			3	- 12,69	3,96
21	- 7,24	40,86	δ Ursæ Majoris R.			May 9	- 12,97	74.46. 37,89	17	- 10,72	6,26
26	- 6,22	40,89	Mar. 17	- 15,63	32. 6. 19,51	14	- 12,39	37,93	Spica.		
χ Ursæ Majoris R.			20	- 14,83	20,09	ε Ursæ Majoris.			Apr. 16	- 16,79	100.21. 1,21
Mar. 17	- 15,19	41.21. 40,32	May 5	- 3,07	20,29	Apr. 2	- 13,21	33.11. 52,50	Spica R.		
20	- 14,50	40,26	γ Corvi.			19	- 8,49	52,63	Apr. 16	- 16,79	100.21. (6,93)
Apr. 3	- 11,25	40,05	Apr. 22	- 20,89	106.40. 50,44	May 9	- 3,36	52,20	Piazzì XIII. 163.		
21	- 7,24	(35,50)	24	- 21,01	51,32	22	- 0,61	51,19	Mar. 28	- 17,25	61. 8. 53,90
26	- 6,22	39,62									

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.
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B. XIII. 638.			Arcturus R.			α^2 Libræ R.			β Coronæ Borealis R.		
Apr. 23	-15.84	98.33.12,36	Apr. 23	-13,69	70. 0.27,34	May 17	-12,17	105.23.38,53	Apr. 24	-11,70	60.21.21,46
May 3	-15,81	11,76	May 3	-12,09	29,79						
			9	-11,13	27,94	* R. 14 ^h . 44 ^m . 0 ^s .			Σ 1950.		
B.A.C. 4591.			30	-7,67	28,54						
			* R. 14 ^h . 11 ^m . 0 ^s .								
Apr. 7	-15,39	98.55.48,13	Apr. 24	-9,54	32.35. 8,59	May 22	-1,22	27.47.22,53	May 17	-6,62	63.57.21,50
24	-15,74	49,47	May 17	-2,77	8,67	June 4	+2,36	23,82	22	-5,50	20,27
η Ursæ Majoris.			22	-1,43	8,46	ξ^2 Libræ.			α Coronæ Borealis.		
Mar. 28	-16,83	39.54.40,84	2 Libræ.								
Apr. 16	-11,92	40,32	Apr. 23	-13,74	101. 0. 9,83				α Coronæ Borealis R.		
May 1	-7,77	40,28	May 2	-13,80	8,34						
2	-7,51	38,55	θ Bootis.								
3	-7,25	38,55	May 17	-3,96	37.25.49,31						
17	-3,67	39,88	22	-2,59	48,19						
30	-0,69	39,70	Σ 1847.								
η Ursæ Majoris R.			June 4	-12,42	99.30.22,15						
Mar. 28	-16,83	39.54.37,84	106 Virginis.								
Apr. 16	-11,92	39,03	Apr. 23	-13,49	96.12. 3,94						
May 1	-7,77	42,07	June 4	-11,71	2,57						
2	-7,51	41,05	Piazzi XIV. 126.								
3	-7,25	40,31	May 22	-1,14	29. 5.21,04						
17	-3,67	39,34	27	+0,23	21,51						
30	-0,69	39,76	Σ 1870.								
τ Virginis.			May 17	-9,91	81.15.38,19						
Apr. 19	-14,98	87.42. 9,61	ϵ Bootis.								
23	-14,55	9,86	May 2	-10,47	62.16. 6,25						
May 27	-11,84	9,25	22	-6,17	7,25						
τ Virginis R.			27	-5,12	7,95						
Apr. 23	-14,55	87.42. 8,38	ϵ Bootis R.								
May 27	-11,84	8,98	May 2	-10,47	62.16. 8,39						
α Draconis.			22	-6,17	10,06						
Apr. 16	-10,79	24.52.56,24	27	-5,12	9,58						
α Draconis R.			α^2 Libræ.								
Apr. 16	-10,79	24.52.52,35	May 17	-12,17	105.23.35,96						
Arcturus.			β Coronæ Borealis.								
Apr. 23	-13,69	70. 0.27,57	Apr. 24	-11,70	60.21.22,65						
May 3	-12,09	26,72									
9	-11,13	27,53									
30	-7,67	27,57									

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.
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κ Herculis.			58 Ophiuchi.			Groombridge 2614.			B.A.C. 6428.		
May 27	-4,03	72.32.9,74	July 1	+3,42	111.36.4,71	Aug. 22	+23,78	39.0.31,41	July 31	+18,72	41.24.25,93
			3	+3,43	3,03	27	+24,70	33,25	Aug. 27	+25,06	25,67
Σ 2011.			7	+3,46	3,55	30	+25,18	32,99	30	+25,60	26,22
June 7	-0,48	60.35.13,62	ι Herculis.			δ Ursæ Minoris.			Σ 2408.		
* R. 16 ^h .9 ^m .16 ^s .			July 16	+13,37	43.54.27,85	Aug. 4	+18,85	3.24.18,92	July 18	+13,45	79.24.2,11
May 27	-0,95	28.24.8,26	ι Herculis R.			8	+19,85	21,17	29	+15,31	1,00
τ Herculis.			July 16	+13,37	43.54.30,58	δ Ursæ Minoris R.			Aug. 20	+18,31	2,05
June 4	+0,48	43.18.51,95	3 Sagittarii.			Aug. 4	+18,85	3.24.20,08	ο Draconis.		
τ Herculis R.			July 1	+3,21	117.45.53,57	8	+19,85	17,92	July 7	+11,07	30.47.58,84
June 4	+0,48	43.18.52,71	3	+3,15	54,55	δ Ursæ Minoris SP.			Aug. 7	+20,89	57,73
B.A.C. 5650.			* R. 17 ^h .46 ^m .42 ^s .			Feb. 17	-10,35	3.24.20,90	ο Draconis R.		
July 1	-2,40	115.19.52,51	July 8	+11,19	48.16.0,88	Mar. 24	-13,85	18,98	July 7	+11,07	30.47.59,88
8	-2,49	60,06	4 Sagittarii.			δ Ursæ Minoris SP. R.			Aug. 7	+20,89	53,46
* R. 16 ^h .46 ^m .32 ^s .			July 3	+4,90	113.47.42,86	Feb. 17	-10,35	3.24.20,56	H. C. 35690.		
June 13	+4,08	30.13.45,15	16	+4,30	40,81	Mar. 24	-13,85	21,70	July 29	+17,09	66.52.17,76
* R. 16 ^h .55 ^m .49 ^s .			19	+4,78	42,22	α Lyrae.			Σ 2445.		
July 3	-1,11	115.15.11,68	ν Ophiuchi.			July 7	+11,23	51.21.23,48	July 8	+12,11	66.53.54,76
H. C. 31147.			Aug. 4	+8,14	99.44.52,64	8	+11,53	23,59	14	+13,62	53,39
July 7	+8,24	61.41.46,65	8	+8,31	54,26	18	+14,45	23,76	ζ Aquilæ.		
ξ Ophiuchi.			70 Ophiuchi.			29	+17,46	23,14	Aug. 15	+18,96	76.21.44,04
July 3	+1,19	110.56.23,99	July 16	+8,45	87.27.29,28	31	+17,96	23,18	27	+20,52	42,55
8	+1,25	24,18	Aug. 8	+10,90	30,42	Aug. 6	+19,34	23,95	Sept. 8	+21,66	42,48
Piazzi XVII. 64.			72 Ophiuchi.			15	+21,29	24,60	ζ Aquilæ R.		
July 19	+11,43	61.0.37,28	Aug. 4	+13,22	80.27.10,46	α Lyrae R.			Aug. 15	+18,96	76.21.44,23
α Ophiuchi.			7	+13,51	12,21	July 7	+11,23	51.21.25,92	27	+20,52	45,22
July 19	+9,52	77.19.19,59	8	+13,71	10,82	8	+11,53	25,48	Sept. 8	+21,66	42,52
α Ophiuchi R.			η Serpentis.			18	+14,45	26,30	π Sagittarii.		
July 19	+9,52	77.19.21,36	July 14	+9,08	92.55.59,98	29	+17,46	25,71	Aug. 29	+11,90	111.15.48,83
B.A.C. 6258.			η Serpentis R.			31	+17,96	24,69	π Sagittarii R.		
Aug. 4	+19,45	38.46.18,43	July 14	+9,08	92.56.1,61	Aug. 6	+19,34	26,00	Aug. 29	+11,90	111.15.52,47
6	+19,94	16,40	B.A.C. 6258.			15	+21,29	26,84	53 Draconis.		
Σ 2400.			Σ 2369.			* R. 18 ^h .41 ^m .1 ^s .			July 8	+11,25	33.24.11,96
July 8	+11,55	73.54.54,47	July 3	+10,12	87.31.32,90	Aug. 15	+18,57	73.53.30,07	31	+18,91	9,90
			14	+11,75	31,90	Σ 2400.					

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53 Draconis R.			H. C. 37589.			16 Vulpeculæ.			α ² Capricorni R.		
July 8	+11,25	33.24. 9,90	July 31	+18,76	69.27.22,11	July 28	+18,47	65.29.28,86	Aug. 29	+19,73	103. 1. 14,96
31	+18,91	11,12				31	+19,21	32,61	Sept. 8	+19,73	13,24
B.A.C. 6590.			γ Aquilæ.			Aug. 1			9	+19,72	15,20
July 14	+12,86	105.47.60,07	Sept. 26	+24,41	79.45.34,79	Σ 2620.			12	+19,69	16,52
Sept. 6	+13,75	59,48	γ Aquilæ R.			July 31			32 Cygni.		
8	+13,75	61,44	Sept. 26	+24,41	79.45.37,47	B.A.C. 6896.			July 29	+18,06	42.45.32,68
9	+13,74	59,20	Σ 2577.			Sept. 19	+26,70	73.18.36,20	Aug. 4	+20,00	32,42
13	+13,71	61,24	July 29	+18,34	69.26.50,48	23	+27,01	35,41	27	+26,76	31,70
Σ 2500.			Aug. 4	+19,66	50,28	25	+27,15	36,93	Sept. 4	+28,74	32,99
Aug. 29	+22,75	70.33.44,64	δ Cygni.			Σ 2621. sp.			19	+31,83	30,89
Sept. 8	+23,90	43,53	Aug. 7	+21,08	45.14.39,25	Aug. 22			32 Cygni R.		
ρ ¹ Sagitta ii.			22	+25,13	38,49	Σ 2621. nf.			July 29	+18,06	42.45.32,85
July 14	+13,44	108. 7.57,29	δ Cygni R.			Aug. 27			Aug. 4	+20,00	32,68
ρ ² Sagittarii.			Aug. 7	+21,08	45.14.38,90	Σ 2622.			27	+26,76	32,99
July 29	+13,76	108.35.23,23	22	+25,13	41,05	Sept. 9			Sept. 4	+28,74	32,73
Aug. 7	+13,85	22,98	α Aquilæ.			26			19	+31,83	32,36
27	+13,77	21,53	Sept. 4	+22,85	81.32. 9,37	15 Sagittæ.			Σ 2662.		
29	+13,75	21,97	23	+24,11	8,03	Aug. 26			July 30	+19,43	79.29. 8,50
Sept. 9	+13,60	24,12	α Aquilæ R.			Sept. 12			Aug. 7	+20,84	10,93
13	+13,53	23,70	Sept. 4	+22,85	81.32.11,73	19			26	+23,68	9,66
19	+13,43	21,91	23	+24,11	12,36	23			Σ 2676.		
23	+13,36	21,76	Piazzi XIX. 307.			25			July 30	+19,27	63.21.47,89
* R. 19 ^h . 13 ^m . 30 ^s .			July 28	+18,04	80. 2.27,03	θ Sagittæ.			Aug. 8	+21,53	49,52
Sept. 19	+12,78	110.55.35,94	31	+18,56	30,45	July 28			22	+24,73	48,50
24	+12,68	36,67	Aug. 15	+20,93	29,89	30			Piazzi XX. 177.		
26	+12,64	35,93	Σ 2596.			31			July 30	+19,84	79.15.28,66
θ Cygni.			Aug. 4	+19,61	75. 6.26,20	Σ 2655. s.			B.A.C. 7079.		
July 14	+13,33	40. 8. 6,73	7	+20,17	24,52	Aug. 7			July 29	+19,64	79.15.24,69
Aug. 15	+23,39	6,12	β Aquilæ.			Σ 2655. n.			Aug. 22	+23,65	24,28
29	+26,91	5,17	Aug. 27	+21,54	83.58.32,90	July 30			Σ 2698.		
Sept. 8	+28,97	5,48	Sept. 12	+22,78	31,95	Aug. 7			July 30	+19,30	62.23.57,90
12	+29,70	4,56	β Aquilæ R.			Σ 2701.			α Delphini.		
θ Cygni R.			Aug. 27	+21,54	83.58.33,56	Aug. 29			Aug. 26	+24,51	78.29. 2,68
July 14	+13,33	40. 8. 3,40	Sept. 12	+22,78	33,58	Sept. 8			29	+24,91	3,91
Aug. 15	+23,39	6,24	α ² Capricorni.			9			Sept. 8	+26,10	6,14
29	+26,91	6,70	Aug. 29	+19,73	103. 1.11,33	12					
Sept. 8	+28,97	7,18	Sept. 8	+19,73	14,35	Aug. 29					
12	+29,70	5,42	9	+19,72	14,14	Sept. 8					
χ Aquilæ.			12	+19,69	12,57	Σ 2655. s.					
July 28	+17,65	78.31.59,66				Aug. 7					
29	+17,83	62,28				Σ 2655. n.					
31	+18,19	62,95				July 30					

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α Delphini R.			Σ 2786.			ν Cephei R.			H. C. 43487.		
Aug. 7	+21,57	74.37.51,27	Aug. 20	+24,70	81.7.31,14	Aug. 20	+21,94	29.35.33,76	Dec. 1	+35,78	60.43.14,77
8	+21,75	52,12	26	+25,56	29,51				3	+35,62	13 12
α Cygni.			Sept. 4	+26,69	27,62	π^2 Cygni.			5	+35,48	13 14
July 31	+18,51	45.16.14,86	α Cephei.			Sept. 23	+32,96	41.24.18,08	6	+35,39	16 14
Aug. 22	+25,23	13,88	July 30	+15,33	28.4.10,54	26	+33,65	17,99	ϵ Cephei.		
26	+26,35	11,36	Aug. 22	+23,55	9,16	30	+34,55	18,40	Aug. 20	+20,99	33.43.40,20
Sept. 9	+30,00	13,81	29	+25,93	10,08	π^2 Cygni R.			Sept. 3	+25,81	40,60
α Cygni R.			Sept. 12	+30,29	9,81	Sept. 23	+32,96	41.24.21,64	Oct. 13	+37,11	39,81
July 31	+18,51	45.16.13,83	19	+32,29	9,62	26	+33,65	19,80	Nov. 1	+40,35	38,87
Aug. 22	+25,23	13,84	Oct. 21	+38,89	10,80	30	+34,55	19,60	ϵ Cephei R.		
26	+26,35	16,84	α Cephei R.			Σ 2847.			Aug. 20	+20,99	33.43.38,21
Sept. 9	+30,00	15,16	July 30	+15,33	28.4.9,31	Aug. 20	+25,55	94.13.34,12	Sept. 3	+25,81	42,24
η Cephei.			Aug. 22	+23,55	9,69	Sept. 3	+26,45	32,83	Oct. 13	+37,11	39,17
July 29	+16,96	28.45.43,19	29	+25,93	8,99	6	+26,58	33,46	Nov. 1	+40,35	40,47
Aug. 4	+19,15	43,65	Sept. 12	+30,29	10,55	Σ 2849.			Σ_2 471.		
Sept. 8	+30,61	42,90	19	+32,29	9,76	Aug. 20	+24,91	70.29.37,59	Sept. 9	+28,14	83.10.25,57
η Cephei R.			Oct. 21	+38,89	8,52	Sept. 12	+29,20	37,90	12	+28,43	24,43
July 29	+16,96	28.45.41,44	β Aquarii.			18	+30,09	36,75	19	+29,04	24,28
Aug. 4	+19,15	41,14	Aug. 26	+24,86	96.14.56,34	α Aquarii.			δ Cephei.		
Sept. 8	+30,61	41,24	Sept. 6	+25,33	58,33	Aug. 26	+26,22	91.4.11,47	Oct. 11	+36,25	32.22.35,05
2 Equulei.			26	+25,61	57,45	Nov. 1	+27,43	13,12	δ Cephei R.		
Aug. 20	+24,09	83.25.33,37	β Aquarii R.			α Aquarii R.			Oct. 11	+36,25	32.22.36,01
29	+25,18	31,73	Aug. 26	+24,86	96.14.60,19	Aug. 26	+26,22	91.4.13,29	Piazzi XXII. 169.		
Sept. 8	+26,18	34,25	Sept. 6	+25,33	58,62	Nov. 1	+27,43	12,18	Dec. 13	+27,14	86.16.26,32
Σ 2749.			26	+25,61	59,37	Σ 2868.			\ast R. 22 ^h .33 ^m .1 ^s .		
Aug. 26	+24,65	87.4.40,24	β Cephei.			Sept. 3	+27,61	68.12.42,10	Dec. 1	+35,90	61.53.62,95
29	+24,93	39,91	Sept. 30	+34,70	20.7.7,82	6	+28,19	39,69	5	+35,67	62,56
Sept. 8	+25,76	41,61	β Cephei R.			12	+29,26	39,00	6	+35,59	59,81
Σ 2767.			Sept. 30	+34,70	20.7.5,69	Σ 2869.			B. xxii. 741.		
Aug. 20	+24,76	70.40.4,41	ϵ Pegasi.			Sept. 6	+27,99	76.7.42,71	Sept. 9	+27,91	90.2.15,55
26	+25,93	2,52	Sept. 6	+27,45	80.49.59,08	12	+28,82	41,55	23	+28,59	16,54
Sept. 6	+27,81	4,02	19	+28,78	56,27	18	+29,57	41,54	24	+28,61	13,92
Σ_2 430.			ϵ Pegasi R.			θ Aquarii.			\circ Pegasi.		
Sept. 8	+28,57	63.28.6,64	Sept. 6	+27,45	80.49.58,47	Oct. 11	+26,25	98.33.8,46	Dec. 3	+35,89	61.29.58,24
23	+30,82	5,82	19	+28,78	59,62	θ Aquarii R.					
24	+30,95	6,61	ν Cephei.			Oct. 11	+26,25	98.33.9,61			
δ Equulei.			Aug. 20	+21,94	29.35.35,26						
Sept. 24	+28,37	80.37.4,11									
26	+28,49	4,05									
30	+28,71	2,53									

Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.	Day of Observa- tion.	Correction to Mean N.P.D.	Mean N.P.D. Jan. 1, 1845.
	"	0 / "		"	0 / "		"	0 / "		"	0 / "
Σ 2936.			B. xxii. 1228.			* R. 23 ^h .14 ^m .50 ^s .			γ Cephei.		
Sept. 26	+ 28,74	89.35.27,42	Dec. 23	+ 25,53	89. 4. 5,97	Dec. 1	+ 34,39	66.44.50,90	Sept. 27	+ 26,04	13.13.56,23
Oct. 16	+ 28,88	27,12	A Piscium.			3	+ 34,32	46,14	γ Cephei R.		
23	+ 28,78	28,48				5	+ 34,22	50,68			
25	+ 28,73	29,61				6	+ 34,20	49,39			
* R. 22 ^h .35 ^m .52 ^s .						B.A.C. 8154.					
Dec. 6	+ 35,58	62. 4.31,99	Dec. 23	+ 25,61	88.42.52,94	Sept. 18	+ 28,02	99.18.32,45	Sept. 27	+ 26,04	13.13.56,54
B. xxii. 772.			* R. 23 ^h .8 ^m .20 ^s .			19	+ 27,97	32,40	ψ Andromedæ.		
Dec. 10	+ 27,20	86.56.17,09	Dec. 1	+ 34,67	66. 7.33,43	23	+ 27,89	32,22	Sept. 22	+ 27,15	44.26.21,08
13	+ 26,96	17,55	5	+ 34,49	29,65	B.A.C. 8188.			30	+ 29,34	21,20
* R. 22 ^h .41 ^m .23 ^s .			6	+ 34,44	29,43				Oct. 9	+ 31,63	21,35
Dec. 1	+ 35,83	62.23. 8,89	10	+ 34,21	29,85	Sept. 9	+ 22,94	32.18.18,60	10	+ 31,86	20,69
5	+ 35,62	9,46	8 Andromedæ.			22	+ 27,30	15,70	14	+ 32,81	21,79
* R. 22 ^h .49 ^m .29 ^s .			Sept. 23	+ 29,17	41.49.50,50	26	+ 28,57	17,92	ψ Andromedæ R.		
Dec. 1	+ 35,63	63.11.43,87	Oct. 10	+ 33,66	49,08	30	+ 29,83	15,99	Sept. 22	+ 27,15	44.26.22,96
α Pegasi.			11	+ 33,89	49,79	Oct. 9	+ 32,50	17,05	30	+ 29,34	23,13
Sept. 22	+ 29,62	75.37.34,63	13	+ 34,36	49,91	23	+ 36,18	17,78	Oct. 9	+ 31,63	23,14
24	+ 29,84	34,30	23	+ 36,48	49,48	24	+ 36,42	17,73	10	+ 31,86	24,20
Oct. 10	+ 31,32	35,10	24	+ 36,68	50,62	B.A.C. 8188 R.			14	+ 32,81	23,05
11	+ 31,39	35,24	Nov. 1	+ 38,06	49,25				Sept. 9	+ 22,94	32.18.18,83	$\omega$ Piscium.
23	+ 32,08	36,55	8 Andromedæ R.			22	+ 27,30	17,76	Nov. 14	+ 28,87	83.59.40,00
α Pegasi R.			Sept. 23	+ 29,17	41.49.48,88	26	+ 28,57	16,78	ω Piscium R.		
Sept. 22	+ 29,62	75.37.39,55	Oct. 10	+ 33,66	50,51	30	+ 29,83	18,31	Nov. 14	+ 28,87	83.59.40,82
24	+ 29,84	40,41	11	+ 33,89	49,15	Oct. 9	+ 32,50	17,57	2 Ceti.		
Oct. 10	+ 31,32	40,00	13	+ 34,36	50,07	23	+ 36,18	18,51	Oct. 24	+ 24,20	108.11.53,65
11	+ 31,39	38,81	23	+ 36,48	49,40	ι Piscium.			2 Ceti R.		
23	+ 32,08	40,49	24	+ 36,68	48,48				Dec. 10	+ 27,01	85.12.47,48	Oct. 24	+ 24,20	108.11.57,21
			Nov. 1	+ 38,06	49,34	ι Piscium R.					
			H. C. 45649.						Dec. 10	+ 27,01	85.12.45,64
			Dec. 3	+ 34,69	65.37.59,24						

CATALOGUE of the CONCLUDED MEAN NORTH POLAR DISTANCES, JAN. 1, 1845;
with the ANNUAL VARIATIONS.

* * The N.P.D. have been corrected for the Discordance of Zenith Points, and the Error of Assumed
Co-latitude, in the manner explained in the Introduction.

Name of Star.	Number of Obser- vations.	Approximate Mean R.A. Jan. 1, 1845.	Mean N.P.D. Jan. 1, 1845.	Annual Variation.	Name of Star.	Number of Obser- vations.	Approximate Mean R.A. Jan. 1, 1845.	Mean N.P.D. Jan. 1, 1845.	Annual Variation.
		<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>			<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>
<i>α</i> Andromedæ.....	6	0. 0. 23	61. 45. 54,22	-20,055	<i>i</i> Persei.....	13	2. 11. 35	34. 52. 2,65	-16,840
<i>α</i> Andromedæ R....	6		54,49		<i>i</i> Persei R.....	13		4,00	
<i>Σ</i> 8. <i>sf</i>	3	0. 3. 38	93. 56. 24,12	-20,053	* Mag. (9, 10)....	1	2. 31. 26	73. 59. 20,32	-15,834
<i>α</i> Cassiopeïæ.....	7	0. 31. 45	34. 18. 47,98	-19,863	<i>δ</i> Ceti.....	3	2. 31. 33	90. 20. 35,09	-15,821
<i>α</i> Cassiopeïæ R....	7		48,81		<i>δ</i> Ceti R.....	1		37,02	
<i>β</i> Ceti.....	2	0. 35. 48	108. 50. 17,86	-19,811	<i>θ</i> Persei. <i>sf</i>	12	2. 33. 39	41. 25. 52,99	-15,715
<i>β</i> Ceti R.....	2		18,44		<i>θ</i> Persei R.....	12		52,34	
<i>γ</i> Cassiopeïæ.....	1	0. 47. 24	30. 7. 25,89	-19,628	<i>γ</i> Ceti. <i>sf</i>	1	2. 35. 17	87. 25. 13,14	-15,624
<i>γ</i> Cassiopeïæ R....	1		26,99		<i>γ</i> Ceti R.....	1		13,45	
<i>φ</i> ³ Ceti.....	2	0. 48. 15	102. 6. 26,68	-19,613	38 Arietis.....	1	2. 36. 31	78. 12. 36,46	-15,557
* (Mag. 8, 9)....	4	0. 49. 50	103. 5. 6,40	-19,583	<i>τ</i> ¹ Eridani.....	1	2. 37. 52	109. 13. 55,51	-15,483
<i>φ</i> ⁴ Ceti.....	5	0. 50. 58	102. 13. 4,20	-19,561	<i>α</i> Ceti.....	2	2. 54. 11	86. 31. 16,62	-14,535
B. o. 962.....	3	0. 54. 31	101. 29. 56,11	-19,490	<i>α</i> Ceti R.....	2		19,03	
<i>ε</i> Piscium.....	2	0. 54. 54	82. 56. 42,07	-19,483	* (Mag. 9).....	1	2. 56. 14	110. 12. 37,30	-14,413
<i>ε</i> Piscium R.....	2		42,53		* (Mag. 9).....	3	2. 56. 20	110. 49. 55,64	-14,406
* (Mag. 9).....	5	0. 58. 10	99. 29. 25,46	-19,413	<i>α</i> Persei.....	8	3. 13. 17	40. 41. 44,72	-13,334
B. o. 1051.....	1	0. 58. 56	99. 31. 31,32	-19,396	<i>α</i> Persei R.....	9		44,47	
28 Ceti.....	4	0. 58. 19	100. 40. 14,34	-19,410	<i>ε</i> Eridani.....	1	3. 25. 38	99. 59. 11,00	-12,510
<i>η</i> Ceti.....	3	1. 0. 48	101. 0. 19,70	-19,354	<i>τ</i> ⁵ Eridani.....	1	3. 26. 57	112. 9. 22,24	-12,420
32 Ceti.....	6	1. 2. 26	99. 43. 53,91	-19,316	<i>τ</i> ⁵ Eridani R.....	1		20,73	
Polaris. <i>nf</i>	3	1. 3. 35	1. 31. 1,47	-19,286	<i>δ</i> Persei.....	2	3. 31. 55	42. 42. 48,68	-12,075
Polaris R.....	3		2,22		<i>δ</i> Persei R.....	2		50,04	
Polaris SP.....	4		1,53		<i>ε</i> Persei. <i>sp</i>	2	3. 47. 28	50. 26. 37,92	-10,962
Polaris SP. R.....	4		2,76		<i>ε</i> Persei R.....	2		56,21	
B. i. 51.....	6	1. 3. 54	98. 45. 14,58	-19,281	<i>λ</i> Tauri.....	2	3. 52. 6	77. 57. 7,48	-10,620
36 Ceti.....	4	1. 5. 0	97. 36. 24,98	-19,254	B.A.C. 1275.....	1	4. 0. 23	77. 1. 2,56	-10,000
37 Ceti.....	5	1. 6. 36	98. 45. 26,12	-19,215	<i>Σ</i> 520.....	1	4. 9. 1	67. 34. 39,14	-9,337
B. i. 186.....	2	1. 11. 47	96. 8. 36,07	-19,080	<i>γ</i> Tauri.....	1	4. 10. 59	74. 45. 8,34	-9,184
<i>ξ</i> Andromedæ.....	1	1. 13. 14	45. 17. 6,89	-19,040	<i>γ</i> Tauri R.....	1		5,39	
<i>ξ</i> Andromedæ R. ..	1		6,27		Aldebaran.....	2	4. 27. 2	73. 48. 26,68	-7,912
B. i. 223.....	5	1. 13. 50	94. 15. 3,88	-19,023	Aldebaran R.....	2		26,76	
B. i. 228.....	6	1. 14. 17	95. 22. 38,27	-19,011	<i>α</i> Camelopardi.....	2	4. 38. 41	23. 55. 47,34	-6,968
B. i. 237.....	6	1. 14. 42	94. 36. 44,78	-18,999	<i>α</i> Camelopardi R....	2		47,06	
H. C. 2553.....	4	1. 16. 28	93. 16. 57,93	-18,949	<i>ε</i> Aurigæ.....	2	4. 50. 51	46. 24. 46,38	-5,960
B. i. 276.....	4	1. 16. 47	91. 46. 47,90	-18,940	<i>ε</i> Aurigæ R.....	2		46,05	
B. i. 497.....	5	1. 28. 25	87. 0. 27,47	-18,581	<i>η</i> Aurigæ.....	1	4. 55. 39	48. 58. 55,11	-5,557
51 Andromedæ....	3	1. 28. 31	42. 9. 33,37	-18,578	<i>η</i> Aurigæ R.....	1		53,30	
51 Andromedæ R..	3		34,39		Capella.....	4	5. 5. 15	44. 9. 60,33	-4,743
B.A.C. 490.....	6	1. 29. 27	78. 42. 50,11	-18,547	Capella R.....	4		59,65	
B. i. 568.....	5	1. 32. 4	85. 51. 51,08	-18,459	B. v. 294.....	3	5. 12. 51	85. 40. 59,24	-4,097
B. i. 576.....	5	1. 32. 17	83. 41. 59,18	-18,451	B. v. 303.....	1	5. 13. 9	86. 8. 52,08	-4,071
B.A.C. 549.....	3	1. 39. 58	73. 45. 16,05	-18,178	B. v. 324.....	6	5. 13. 56	84. 45. 33,50	-4,004
B. i. 736.....	5	1. 40. 32	83. 5. 22,67	-18,156	B. v. 356.....	1	5. 15. 17	84. 49. 47,13	-3,888
1 Arietis.....	1	1. 41. 35	68. 29. 48,22	-18,118	<i>β</i> Tauri.....	1	5. 16. 30	61. 31. 45,59	-3,781
<i>γ</i> Arietis. <i>s</i>	2	1. 45. 2	71. 28. 3,96	-17,986	<i>β</i> Tauri R.....	1		47,96	
<i>γ</i> Arietis. <i>n</i>	2	1. 45. 2	71. 27. 54,36	-17,986	B. v. 399.....	1	5. 17. 3	85. 56. 50,72	-3,736
B.A.C. 609.....	6	1. 51. 9	78. 27. 34,46	-17,743	B. v. 623.....	2	5. 24. 57	83. 55. 47,81	-3,055
<i>α</i> Piscium. <i>sf</i>	1	1. 54. 2	87. 59. 16,03	-17,624	<i>Σ</i> 734. <i>nf</i> *.....	1	5. 25. 17	91. 49. 58,97	-3,026
<i>γ</i> Andromedæ. <i>sp</i> ..	1	1. 54. 25	48. 25. 1,01	-17,608	<i>α</i> Leporis.....	1	5. 25. 54	107. 56. 16,71	-2,971
<i>γ</i> Andromedæ R....	1		0,96		* (Mag. 8, 9)....	5	5. 26. 26	83. 33. 23,37	-2,927
B. i. 988.....	5	1. 55. 0	79. 5. 40,37	-17,583	* (Mag. 8, 9)....	2	5. 27. 4	83. 20. 36,18	-2,872
B.A.C. 632.....	1	1. 55. 13	72. 29. 40,56	-17,574	<i>ε</i> Orionis.....	2	5. 28. 21	91. 18. 20,74	-2,759
* (Mag. 9, 10)....	4	1. 57. 25	78. 50. 23,98	-17,480	<i>ζ</i> Tauri.....	1	5. 28. 23	68. 57. 28,08	-2,758
B.A.C. 650.....	2	1. 59. 16	72. 42. 40,83	-17,400	125 Tauri.....	1	5. 30. 8	64. 11. 45,46	-2,606

* The close double-star.

Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1845.	Mean N.P.D. Jan. 1, 1845.	Annual Variation.	Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1845.	Mean N.P.D. Jan. 1, 1845.	Annual Variation.
		<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>			<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>
B. v. 925.....	2	5.35.40	82.38.50,98	- 2,125	ε Leonis.....	1	9.37.3	65.30.53,28	+ 16,280
B. v. 1015.....	3	5.39.30	82.6.1,35	- 1,792	ε Leonis R.....	1		53,21	
δ Aurigæ.....	2	5.46.46	35.44.8,52	- 1,157	υ Ursæ Majoris....	1	9.39.55	30.14.8,47	+ 16,424
α Orionis.....	3	5.46.47	82.37.38,13	- 1,154	υ Ursæ Majoris R..	1		5,24	
α Orionis R.....	3		36,97		φ Ursæ Majoris....	3	9.41.31	35.12.53,71	+ 16,504
B. v. 1338.....	2	5.52.6	80.53.31,40	- 0,691	B. ix. 929.....	3	9.42.25	75.9.33,28	+ 16,549
B. v. 1359.....	2	5.52.49	80.56.20,01	- 0,628	23 Leonis.....	1	9.42.38	76.12.41,87	+ 16,560
H. C. 11457.....	1	5.54.49	80.50.33,79	- 0,454	H. C. 19371.....	1	9.45.22	74.32.7,56	+ 16,693
H. C. 11496.....	1	5.56.52	44.26.7,05	- 0,274	Σ 1397. <i>np</i>	1	9.47.57	64.12.43,64	+ 16,817
Σ 840. <i>nf</i>	1	5.57.52	79.14.26,74	- 0,187	Σ 1396. <i>np</i>	1	9.48.5	78.36.6,82	+ 16,824
1 Lyncis.....	2	6.3.37	28.26.38,27	+ 0,316	B.A.C. 3398.....	2	9.48.13	80.20.6,38	+ 16,830
1 Lyncis R.....	2		38,55		Σ 1404. <i>sf</i>	2	9.56.23	90.56.33,33	+ 17,208
η Geminorum.....	1	6.5.32	67.27.13,30	+ 0,484	Regulus.....	2	10.0.7	77.16.38,33	+ 17,375
β Canis Majoris....	3	6.15.53	107.52.60,86	+ 1,389	Regulus R.....	2		38,34	
β Canis Majoris R..	3		59,02		B.A.C. 3476.....	2	10.3.33	96.33.17,92	+ 17,522
15 Geminorum.....	2	6.18.32	69.7.17,16	+ 1,620	Σ ₂ 213.....	2	10.4.22	61.48.41,18	+ 17,556
γ Geminorum.....	3	6.28.45	73.28.26,42	+ 2,509	λ Ursæ Majoris....	2	10.7.44	46.18.50,51	+ 17,697
γ Geminorum R....	3		25,60		λ Ursæ Majoris R..	2		49,43	
Sirius.....	3	6.38.19	106.30.26,26	+ 4,480	B.A.C. 3506.....	1	10.7.49	71.29.26,18	+ 17,700
Sirius R.....	3		25,69		γ Leonis. <i>np</i>	3	10.11.25	69.22.35,66	+ 17,846
ω Geminorum.....	2	6.52.58	65.34.9,33	+ 4,593	44 Leonis.....	1	10.17.5	80.25.43,45	+ 18,067
ζ Geminorum.....	2	6.54.55	69.12.28,32	+ 4,759	48 Leonis.....	2	10.26.43	82.15.1,03	+ 18,417
ζ Geminorum R....	2		27,16		42 Leonis Minoris..	1	10.37.14	58.30.10,82	+ 18,762
δ Geminorum. <i>nf</i> ...	1	7.10.52	67.44.15,39	+ 6,105	42 Leonis Minoris R.	1		8,72	
δ Geminorum R....	1		15,68		40 Sextantis. <i>s</i>	1	10.41.26	93.12.22,08	+ 18,889
2 Canis Minoris....	2	7.17.10	80.25.23,79	+ 6,626	α Ursæ Majoris....	3	10.54.7	27.24.48,70	+ 19,233
Castor. <i>nf</i>	1	7.24.42	57.46.40,15	+ 7,247	α Ursæ Majoris R..	2		48,70	
Castor R.....	1		38,30		Σ 1507. <i>np</i>	3	10.58.5	82.7.40,98	+ 19,328
υ Geminorum.....	2	7.26.22	62.45.54,15	+ 7,380	B. x. 1053.....	1	10.58.7	82.1.35,96	+ 19,329
Procyon.....	5	7.31.11	84.22.54,75	+ 8,754	B.A.C. 2831.....	3	11.5.32	69.1.24,01	+ 19,492
Procyon R.....	5		54,75		p ⁵ Leonis.....	2	11.5.50	89.13.37,67	+ 19,498
Pollux.....	3	7.35.49	61.36.17,08	+ 8,147	δ Leonis.....	1	11.5.51	68.37.40,99	+ 19,499
Pollux R.....	3		15,92		δ Leonis R.....	1		39,31	
φ Geminorum.....	2	7.44.0	62.50.17,18	+ 8,792	Piazzi XI. 27.....	2	11.9.53	46.50.8,33	+ 19,578
Σ 1200. <i>n</i>	1	8.4.34	39.45.49,70	+ 10,372	ξ Ursæ Majoris. <i>np</i> .	3	11.9.54	57.35.57,40	+ 19,578
β Cancri.....	3	8.8.6	80.20.29,87	+ 10,635	Σ 1530. <i>sf</i>	1	11.11.53	96.3.6,24	+ 19,615
β Cancri R.....	3		26,36		ι Leonis. <i>sp</i>	1	11.15.50	78.37.4,25	+ 19,684
B. VIII. 228.....	1	8.9.9	85.18.28,33	+ 10,713	ε Leonis.....	3	11.22.24	92.8.56,14	+ 19,786
21 Cancri.....	2	8.15.26	78.52.22,56	+ 11,174	Σ 1558*.....	1	11.28.36	67.40.16,28	+ 19,867
ο Ursæ Majoris....	5	8.17.20	28.46.14,12	+ 11,311	υ Leonis.....	1	11.29.1	89.58.6,77	+ 19,872
ο Ursæ Majoris R..	5		12,70		υ Leonis R.....	1		4,73	
B. VIII. 466.....	1	8.17.33	87.23.50,30	+ 11,327	Σ 1564. <i>nf</i>	1	11.31.30	62.11.6,39	+ 19,900
B.A.C. 2822.....	1	8.17.36	81.56.4,85	+ 11,331	χ Ursæ Majoris....	5	11.37.51	41.21.41,12	+ 19,962
B. VIII. 644.....	3	8.24.36	78.12.30,68	+ 11,831	χ Ursæ Majoris R..	4		39,81	
B.A.C. 2872.....	1	8.25.10	76.12.58,84	+ 11,871	* (Mag. 9)†.....	2	11.38.50	83.15.34,40	+ 19,970
* (Mag. 9).....	1	8.29.49	76.31.39,63	+ 12,196	Σ 1576. <i>nf</i>	1	11.44.51	58.18.41,45	+ 20,012
Piazzi VIII. 131. <i>np</i> .	1	8.32.25	40.35.6,62	+ 12,376	Piazzi XI. 181....	3	11.46.36	40.12.2,06	+ 20,021
H. C. 17139.....	2	8.34.10	72.59.56,39	+ 12,496	* (Mag. 9).....	1	11.52.28	39.33.12,46	+ 20,045
A ¹ Cancri.....	2	8.34.39	76.45.59,91	+ 12,520	ο Virginis.....	1	11.57.19	80.24.20,86	+ 20,054
η Hydræ.....	1	8.35.7	86.2.56,19	+ 12,561	ο Virginis R.....	1		21,14	
B.A.C. 3017.....	4	8.45.3	69.27.4,08	+ 13,227	Σ 1604. <i>np</i>	1	12.1.28	100.59.13,17	+ 20,055
* (Mag. 9).....	3	8.45.8	69.11.11,45	+ 13,232	10 Virginis.....	2	12.1.45	87.13.53,66	+ 20,055
ρ ³ Cancri.....	2	8.46.22	61.29.7,00	+ 13,313	Σ 1619. <i>sf</i>	1	12.7.12	96.23.35,45	+ 20,046
ο ³ Cancri.....	1	8.48.56	73.49.38,46	+ 13,480	δ Ursæ Majoris....	3	12.7.44	32.6.20,89	+ 20,044
66 Cancri.....	1	8.51.53	57.8.45,99	+ 13,670	δ Ursæ Majoris R..	3		20,54	
σ ² Ursæ Majoris. <i>nf</i>	1	8.56.40	22.14.33,12	+ 13,974	γ Corvi.....	2	12.7.51	106.40.51,65	+ 20,044
Σ 1324. <i>sf</i>	2	9.4.55	63.11.13,48	+ 14,482	c Virginis.....	2	12.12.29	85.49.25,86	+ 20,025
Σ 1332. <i>sp</i>	1	9.8.22	65.42.2,55	+ 14,690	Σ 1634. <i>np</i>	1	12.12.53	66.13.27,14	+ 20,023
Σ 3121.....	1	9.8.41	60.46.22,39	+ 14,708	H. C. 23136.....	1	12.13.17	64.6.49,09	+ 20,022
B. ix. 176.....	4	9.8.41	93.45.38,19	+ 14,708	H. C. 23132.....	2	12.13.38	64.8.29,41	+ 20,020
83 Cancri.....	2	9.10.19	71.38.27,46	+ 14,805	δ Corvi.....	2	12.21.51	105.39.6,70	+ 19,965
B. ix. 298.....	3	9.13.54	92.8.12,11	+ 15,015	δ Corvi R.....	2		4,87	
A Hydræ.....	2	9.17.39	94.27.6,07	+ 15,230	B.A.C. 4218.....	2	12.22.41	79.25.29,21	+ 19,957
α Hydræ.....	3	9.19.58	97.59.22,76	+ 15,363	B.A.C. 4254.....	2	12.30.28	87.17.28,27	+ 19,878
α Hydræ R.....	3		21,98		B.A.C. 4255.....	2	12.30.45	93.31.13,36	+ 19,875
B. ix. 627.....	5	9.27.58	84.47.41,77	+ 15,802	Σ 1678. <i>nf</i>	2	12.37.40	74.46.38,53	+ 19,785
2 Sextantis.....	2	9.30.22	84.39.12,95	+ 15,930	ε Ursæ Majoris....	4	12.47.12	33.11.51,82	+ 19,632
Σ ₂ 205.....	1	9.32.47	48.19.16,31	+ 16,058	ε Ursæ Majoris R..	4		51,19	

* The close double-star.

† The R.A. is that of B. XI. 687.

Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1845.	Mean N.P.D. Jan. 1, 1845.	Annual Variation.	Name of Star.	Number of Observations.	Approximate Mean R.A. Jan. 1, 1845.	Mean N.P.D. Jan. 1, 1845.	Annual Variation.
		<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>			<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>
Σ 1699.....	1	12.51.12	61.40.56,46	+19,557	ι Herculis.....	1	17.35.6	43.54.28,45	+2,175
κ Virginis. <i>sp.</i>	2	12.51.41	92.58.28,03	+19,547	ι Herculis R.....	1		30,16	
α Comæ.....	2	13.2.27	71.38.55,72	+19,315	3 Sagittarii.....	2	17.37.48	117.45.54,89	+1,940
Σ 1727. <i>np.</i>	1	13.2.32	57.48.9,77	+19,313	* (Mag. 9).....	1	17.46.42	48.16.1,67	+1,163
B. xiii. 113.....	2	13.7.26	97.14.10,03	+19,193	4 Sagittarii.....	3	17.50.20	113.47.42,77	+0,846
Σ 1733. <i>np.</i>	2	13.8.44	71.55.22,75	+19,160	ν Ophiuchi.....	2	17.50.30	99.44.54,14	+0,831
* (Mag. 8.).....	1	13.10.1	30.58.37,22	+19,127	70 Ophiuchi. <i>np.</i> ...	2	17.57.37	87.27.30,14	+0,209
* (Mag. 9.).....	3	13.10.22	71.53.4,97	+19,117	72 Ophiuchi.....	3	18.0.0	80.27.11,49	0,000
Spica.....	1	13.17.2	100.21.1,91	+18,932	η Serpentis.....	1	18.13.17	92.56.0,48	-1,161
Piazzi XIII. 163...	1	13.33.30	61.8.54,79	+18,409	η Serpentis R.....	1		1,29	
B. xiii. 638.....	2	13.36.28	98.33.12,73	+18,305	B.A.C. 6258.....	2	18.17.50	38.46.17,63	-1,559
B.A.C. 4591.....	2	13.39.2	98.55.49,48	+18,212	Groombridge 2614..	4	18.30.41	39.0.32,84	-2,677
η Ursæ Majoris.....	7	13.41.26	39.54.40,05	+18,123	δ Ursæ Minoris.....	2	18.22.20	3.24.19,19	-1,937
η Ursæ Majoris R..	7		39,77		δ Ursæ Minoris R..	2		20,04	
τ Virginis.....	3	13.53.46	87.42.9,87	+17,635	δ Ursæ Minoris SP.	2		20,65	
τ Virginis R.....	2		8,56		δ Ursæ Min. SP. R.	2		20,24	
α Draconis.....	1	14.0.12	24.52.55,39	+17,360	α Lyrae.....	7	18.31.41	51.21.24,52	-2,766
α Draconis R.....	1		53,38		α Lyrae R.....	7		25,18	
Arcturus.....	4	14.8.36	70.0.28,11	+18,938	Σ 2369. <i>np.</i>	2	18.36.9	87.31.32,70	-3,150
Arcturus R.....	4		27,82		* (Mag. 9).....	1	18.41.1	73.53.30,71	-3,570
* (Mag. 7).....	3	14.11.0	32.35.8,21	+16,867	Σ 2400. <i>sf.</i>	1	18.41.58	73.54.55,11	-3,652
2 Libræ.....	2	14.15.6	101.0.9,80	+16,671	B.A.C. 6428.....	3	18.44.11	41.24.26,37	-3,842
θ Bootis.....	2	14.19.55	37.25.48,82	+16,432	Σ 2408. <i>np.</i>	3	18.44.41	79.24.2,09	-3,885
Σ 1847. <i>nf.</i>	1	14.20.22	99.30.22,84	+16,410	ο Draconis. <i>sf.</i>	2	18.48.55	30.47.57,79	-4,248
106 Virginis.....	2	14.20.32	96.12.3,88	+16,402	ο Draconis R.....	2		59,85	
Piazzi XIV. 126...	2	14.27.30	29.5.20,67	+16,043	H. C. 35690.....	1	18.57.11	66.52.18,58	-4,952
Σ 1870. <i>nf.</i>	1	14.35.19	81.15.38,50	+15,624	Σ 2445. <i>nf.</i>	2	18.58.8	66.53.54,90	-5,033
ε Bootis. <i>sf.</i>	3	14.38.13	62.16.8,03	+15,462	ζ Aquilæ.....	3	18.58.17	76.21.43,55	-5,048
ε Bootis R.....	3		8,64		ζ Aquilæ R.....	3		43,64	
α ² Libræ.....	1	14.42.19	105.23.36,72	+15,231	π Sagittarii.....	1	19.0.33	111.15.49,63	-5,237
α ² Libræ R.....	1		37,95		π Sagittarii R.....	1		51,85	
* (Mag. 9).....	2	14.44.0	27.47.22,49	+15,136	53 Draconis.....	2	19.8.44	33.24.10,63	-5,925
ε ² Libræ.....	2	14.48.22	100.46.48,36	+14,883	53 Draconis R.....	2		10,99	
δ Libræ.....	2	14.52.42	97.53.58,86	+14,626	B.A.C. 6590.....	5	19.10.10	105.48.1,05	-6,045
i Bootis. <i>nf.</i>	1	14.58.41	41.44.23,09	+14,263	Σ 2500. <i>sp.</i>	2	19.12.40	70.33.44,83	-6,253
i Bootis R.....	1		20,63		ρ ¹ Sagittarii.....	1	19.12.41	108.7.58,07	-6,254
β Libræ.....	3	15.8.40	98.48.23,79	+13,633	ρ ² Sagittarii.....	8	19.12.48	108.35.23,43	-6,264
β Libræ R.....	3		24,20		* (Mag. 8).....	3	19.13.30	110.55.36,98	-6,322
Σ 1935. <i>np.</i>	1	15.13.51	58.44.16,28	+13,299	θ Cygni.....	5	19.32.17	40.8.5,95	-7,859
ο ² Libræ.....	2	15.14.24	104.34.34,96	+13,263	θ Cygni R.....	5		5,63	
μ Bootis.....	2	15.18.38	52.4.33,74	+12,983	χ Aquilæ.....	3	19.35.17	78.31.2,05	-8,100
β Coronæ Borealis..	1	15.21.27	60.21.23,55	+12,794	H. C. 37589.....	1	19.38.27	69.27.22,88	-8,353
β Coronæ Bor. R..	1		20,74		γ Aquilæ.....	1	19.38.53	79.45.35,14	-8,390
Σ 1950. <i>np.</i>	2	15.23.21	63.57.21,75	+12,665	γ Aquilæ R.....	1		37,30	
α Coronæ Borealis..	1	15.28.8	62.45.34,78	+12,337	Σ 2577. <i>nf.</i>	2	19.39.34	69.26.51,15	-8,441
α Coronæ Borealis R.	1		35,18		δ Cygni. <i>sp.</i>	2	19.40.8	45.14.39,56	-8,486
γ Coronæ Borealis..	1	15.36.14	63.12.34,26	+11,772	δ Cygni R.....	2		39,47	
α Serpentis.....	1	15.36.38	83.4.56,85	+11,741	α Aquilæ.....	2	19.43.13	81.32.9,00	-8,731
α Serpentis R.....	1		56,02		α Aquilæ R.....	2		11,93	
Σ 1973. <i>sf.</i>	2	15.40.37	53.4.19,96	+11,459	Piazzi XIX. 307. <i>sf.</i>	3	19.44.52	80.2.29,46	-8,860
γ Serpentis.....	2	15.49.18	73.49.40,21	+10,827	Σ 2596. <i>sf.</i>	2	19.46.55	75.6.25,96	-9,021
48 Libræ.....	1	15.49.31	103.49.37,83	+10,811	β Aquilæ.....	2	19.47.42	83.58.32,67	-8,543
θ Draconis.....	3	15.59.0	31.1.9,42	+10,103	β Aquilæ R.....	2		33,51	
θ Draconis R.....	3		8,75		16 Vulpeculæ.....	3	19.55.27	65.29.31,83	-9,681
κ Herculis. <i>sp.</i>	1	16.1.5	72.32.10,42	+9,946	Σ 2620. <i>sf.</i>	1	19.56.50	78.38.18,54	-9,787
Σ 2011. <i>sp.</i>	1	16.1.23	60.35.14,51	+9,922	B.A.C. 6896.....	3	19.56.57	73.18.36,84	-9,796
* (Mag. 9).....	1	16.9.16	28.24.7,61	+9,317	Σ 2621. <i>sp.</i>	1	19.57.6	81.11.38,22	-9,807
τ Herculis.....	1	16.15.5	43.18.52,50	+8,864	Σ 2621. <i>nf.</i>	2	19.57.7	81.11.34,21	-9,807
τ Herculis R.....	1		52,34		Σ 2622. <i>nf.</i>	2	19.57.7	73.25.54,18	-9,807
B.A.C. 5650.....	2	16.42.47	115.19.57,11	+6,630	15 Sagittæ.....	5	19.57.8	73.20.43,34	-9,810
* (Mag. 8).....	1	16.46.32	30.13.44,61	+6,319	θ Sagittæ*.....	3	20.3.6	69.32.29,37	-10,262
* (Mag. 8, 9).....	1	16.55.49	115.15.12,50	+5,543	Σ 2655. <i>s.</i>	1	20.7.19	68.14.36,26	-10,577
H. C. 31147.....	1	16.59.22	61.41.47,53	+5,244	Σ 2655. <i>n.</i>	3	20.7.19	68.14.29,64	-10,577
ξ Ophiuchi.....	2	17.11.43	110.56.24,88	+4,194	α ² Capricorni.....	4	20.9.27	103.1.13,84	-10,737
Piazzi XVII. 64...	1	17.12.44	61.0.38,17	+4,107	α ² Capricorni R..	4		14,42	
α Ophiuchi.....	1	17.27.45	77.19.20,08	+2,812	32 Cygni.....	5	20.10.41	42.45.32,67	-10,826
α Ophiuchi R.....	1		21,05		32 Cygni R.....	5		32,37	
58 Ophiuchi.....	3	17.34.9	111.36.4,56	+2,257	Σ 2662. <i>sp.</i>	3	20.11.10	79.29.10,07	-10,862

* The last and brightest of the three.

Name of Star.	Number of Obser- vations.	Approximate Mean R.A. Jan. 1, 1845.	Mean N.P.D. Jan. 1, 1845.	Annual Variation.	Name of Star.	Number of Obser- vations.	Approximate Mean R.A. Jan. 1, 1845.	Mean N.P.D. Jan. 1, 1845.	Annual Variation.
		<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>			<i>h. m. s.</i>	<i>° ' "</i>	<i>"</i>
Σ 2676. <i>np.</i>	3	20. 16. 21	63. 21. 49,51	-11,240	H. C. 43487.....	4	22. 9. 13	60. 43. 15,38	-17,757
Piazzi. XX. 177 ...	1	20. 23. 48	79. 15. 29,04	-11,774	ϵ Cephei.....	4	22. 9. 20	33. 43. 39,60	-17,762
B.A.C. 7079.....	2	20. 23. 49	79. 15. 24,87	-11,775	ϵ Cephei R.....	4		40,47	
Σ 2698. <i>sf.</i>	1	20. 27. 16	62. 23. 58,78	-12,018	Σ 471.....	3	22. 21. 29	83. 10. 25,02	-18,231
Σ 2701.....	3	20. 29. 36	78. 29. 4,66	-12,181	δ Cephei.....	1	22. 23. 26	32. 22. 34,68	-18,301
α Delphini.....	2	20. 32. 26	74. 37. 51,04	-12,377	δ Cephei R.....	1		36,56	
α Delphini R.....	2		51,26		Piazzi XXII. 169..	1	22. 30. 59	86. 16. 26,57	-18,562
α Cygni.....	4	20. 36. 9	45. 16. 14,17	-12,632	* (Mag. 9).....	3	22. 33. 1	61. 54. 2,65	-18,628
α Cygni R.....	4		14,41		B. xxii. 741.....	3	22. 34. 28	90. 2. 15,72	-18,675
η Cephei.....	3	20. 42. 8	28. 45. 42,62	-13,034	α Pegasi.....	1	22. 34. 29	61. 29. 59,12	-18,675
η Cephei R.....	3		42,08		Σ 2936. <i>sp.</i>	4	22. 35. 3	89. 35. 28,53	-18,693
2 Equulei.....	3	20. 54. 34	83. 25. 33,37	-13,841	* (Mag. 9).....	1	22. 35. 52	62. 4. 32,87	-18,719
Σ 2749. <i>np.</i>	3	20. 56. 57	87. 4. 40,87	-13,991	B. xxii. 772.	2	22. 35. 57	86. 56. 17,59	-18,721
Σ 2767.....	3	21. 3. 25	70. 40. 4,39	-14,391	* (Mag. 9, 10)....	2	22. 41. 23	62. 23. 10,06	-18,887
Σ 430. <i>nf.</i>	3	21. 5. 0	66. 28. 7,18	-14,487	* (Mag. 8, 9).....	1	22. 49. 29	63. 11. 44,74	-19,113
δ Equulei. <i>sp.</i>	3	21. 6. 56	80. 37. 3,88	-14,604	α Pegasi.....	5	22. 57. 3	75. 37. 35,74	-19,304
Σ 2786.....	3	21. 12. 5	81. 7. 29,73	-14,909	α Pegasi R.....	5		39,45	
α Cephei.....	6	21. 14. 53	28. 4. 9,33	-15,072	B. xxii. 1228.....	1	22. 57. 32	89. 4. 6,32	-19,315
α Cephei R.....	6		10,32		A Piscium.....	1	23. 0. 45	88. 42. 53,28	-19,389
β Aquarii.....	3	21. 23. 24	96. 14. 57,99	-15,554	* (Mag. 8).....	4	23. 8. 20	66. 7. 31,42	-19,548
β Aquarii R.....	3		58,95		8 Andromedæ.....	7	23. 10. 34	41. 49. 50,26	-19,591
β Cephei. <i>nf.</i>	1	21. 26. 38	20. 7. 6,87	-15,730	8 Andromedæ R....	7		49,12	
β Cephei R.....	1		6,82		H. C. 45649.....	1	23. 11. 8	65. 38. 0,08	-19,602
ϵ Pegasi.....	2	21. 36. 34	80. 49. 58,00	-16,256	* (Mag. 9).....	4	23. 14. 50	66. 44. 50,10	-19,667
ϵ Pegasi R.....	2		58,91		B.A.C. 8154. <i>sf.</i>	3	23. 15. 43	99. 18. 33,04	-19,682
ν Cephei.....	1	21. 40. 59	29. 35. 34,68	-16,478	B.A.C. 8188.....	7	23. 22. 54	32. 18. 16,87	-19,793
ν Cephei R.....	1		34,52		B.A.C. 8188 R.....	7		18,49	
π^2 Cygni.....	3	21. 41. 4	41. 24. 18,59	-16,482	ι Piscium.....	1	23. 31. 59	85. 12. 47,70	-19,356
π^2 Cygni R.....	3		20,10		ι Piscium R.....	1		45,60	
Σ 2847.....	3	21. 50. 4	94. 13. 34,03	-16,918	γ Cephei.....	1	23. 33. 2	13. 13. 55,28	-19,917
Σ 2849. <i>sf.</i>	3	21. 50. 25	70. 29. 38,15	-16,934	γ Cephei R.....	1		57,67	
α Aquarii.....	2	21. 57. 49	91. 4. 12,73	-17,273	ψ Andromedæ.....	5	23. 38. 22	44. 26. 21,86	-19,966
α Aquarii R.....	2		12,49		ψ Andromedæ R....	5		22,84	
Σ 2868.....	3	22. 2. 6	68. 12. 41,05	-17,460	ω Piscium.....	1	23. 51. 21	83. 59. 40,24	-20,041
Σ 2869. <i>nf.</i>	3	22. 2. 51	76. 7. 42,48	-17,492	ω Piscium R.....	1		40,76	
θ Aquarii.....	1	22. 8. 39	98. 33. 9,13	-17,734	2 Ceti.....	1	23. 55. 48	108. 11. 54,43	-20,052
θ Aquarii R.....	1		9,12		2 Ceti R.....	1		56,61	

THE only observations of Moving Bodies included in the Meridian observations of 1845, are those which, with the Greenwich Mean Solar Times of observation, are here subjoined.

ASTRÆA.

Greenwich Mean Solar Time of Transit.	R.A. of the Planet from Observation.	Seconds of Calculated R.A.	Excess of Calculated R.A.
<i>d. h. m. s.</i>	<i>h. m. s.</i>	<i>s.</i>	<i>s.</i>
1845, Dec. 30 . 9 . 27 . 33,1	4 . 4 . 38,13	38,20	+ 0,07

COLLA'S COMET.

Greenwich Mean Solar Time of Transit.	Apparent R.A. of the Comet from Observation.	Apparent N.P.D. of the Comet from observation.
<i>d. h. m. s.</i>	<i>h. m. s.</i>	<i>° ' "</i>
1845, June 10 . 12 . 43 . 36,9	18 . 0 . 53,49	44 . 46 . 4,70
11 . 12 . 59 . 4,8	18 . 20 . 20,44	45 . 18 . 7,60
12 . 13 . 12 . 57,1	18 . 38 . 11,64	46 . 4 . 30,13
13 . 13 . 25 . 8,5	18 . 54 . 21,57	47 . 2 . 5,91

The N.P.D. of the Comet are not corrected for Parallax, nor for the Discordance of Zenith Points. There were no reflexion observations below the Pole proper for the determination of the latter Correction.

It is a common mistake to think that the only way to get the most out of a patient is to ask him a lot of questions. In fact, the best way to get the most out of a patient is to listen to him. The doctor should listen to the patient's story, and then ask him a few questions to clarify the story. This will help the doctor to understand the patient's problem, and to make a diagnosis. The doctor should also listen to the patient's feelings, and to his hopes and fears. This will help the doctor to understand the patient's needs, and to make a plan of treatment that will meet those needs.

1. The patient's story	2. The doctor's diagnosis	3. The doctor's plan of treatment
4. The patient's response to treatment	5. The doctor's evaluation of the patient's progress	6. The doctor's recommendation for further treatment

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OCCULTATIONS
OF
FIXED STARS BY THE MOON,
WITH
THE EQUATIONS GIVEN BY THE CALCULATION
OF THE OCCULTATIONS.

1845.

COMPARISONS OF CLOCKS AND CHRONOMETERS USED IN THE CALCULATION
OF THE FOLLOWING OCCULTATIONS.

** THE letter *H* is an abbreviation for Hardy, the Transit Clock; *G* for Graham, the Clock in the Dome, commonly used with the Five-feet Equatoreal. *U* and *X* are Sidereal Chronometers, and *W* is a Solar Chronometer, each beating half-seconds.

Day of Comparison.	Clock.	Clock Time.	Chron.	Chronometer Time.	Day of Comparison.	Clock.	Clock Time.	Chron.	Chronometer Time.
1845.		<i>h. m. s.</i>		<i>h. m. s.</i>	1845.		<i>h. m. s.</i>		<i>h. m. s.</i>
Feb. 4	H.	8.37.20,2	U.	8.41.15,0	Sept. 14	H.	19.54.20	W.	8.25.2,0
Aug. 20	G.	19.32.50	U.	19.21.10,6		H.	19.54.26	U.	19.53.20,0
	H.	19.27.52	U.	19.26.10,4	Sept. 15	H.	1.5.8	U.	1.7.0,5
Aug. 26	G.	23.14.22	U.	23.11.9,8		H.	2.11.20	U.	2.13.12,6
	H.	23.27.50	U.	23.26.41,4	Oct. 23	G.	2.31.35	W.	12.22.45,5
	G.	2.40.25	U.	2.37.10,7		H.	2.31.46	W.	12.24.45,5
	H.	2.42.58	U.	2.41.49,3		G.	3.24.34	W.	13.15.35,5
Sept. 13	U.*	20.7.38	W.	8.43.5,0		H.	3.26.6	W.	13.18.57,0
	H.	20.9.17	W.	8.43.40,0		H.	3.24.31	U.	3.25.19,8
	G.	20.21.6	W.	8.47.10,0	Dec. 6	H.	3.31.9	U.	3.31.35,5
	H.	20.13.39,3	U.	20.12.35,0		G.	3.51.49	W.	10.31.11,0
Sept. 14	H.†	20.15.43	W.	8.50.5,0		H.	3.37.33	W.	10.36.15,5
	H.	19.16.7	U.	19.15.1,4		H.	3.39.42	X.	3.40.25,2
	G.	19.22.21	W.	7.44.45,5		H.	4.19.39	U.	4.20.5,5
	H.	19.21.43	W.	7.52.30,0		H.	4.22.30	X.	4.23.13,3
	G.	19.57.4,3	W.	8.20.1,5					

* *U* and *H* were compared both by the intervention of *W*, and directly: the result of the former comparison is adopted.

† This comparison is not made use of.

Day of Observation 1845.	Ref. No.	Star.	Phænomenon.	Moon's Limb.	Clock or Chronom.	Instrument.	Time by Clock or Chronometer.	Sidereal Time.	Greenwich Mean Solar Time.	Observer.
							<i>h. m. s.</i>	<i>h. m. s.</i>	<i>h. m. s.</i>	
Feb. 14	1	ω^a Tauri	Disappearance	Dark	U.	Northumb. Equat.	8.35.28,5	8.32.48,33	10.53.10,17	C.
Aug. 20	2	δ Piscium	Reappearance	Dark	G.	5-feet Equatoreal	19.29.14,8	19.19.41,30	9.23.2,20	B.
26	3	χ^a Orionis	Reappearance	Dark	G.	5-feet Equatoreal	23.8.40,1	23.7.9,01	12.46.17,20	B.
					U.	46-inch Dollond	23.5.31,5	23.7.12,61	12.46.20,79	M
...	4	E ¹ Orionis	Disappearance	Bright	G.	5-feet Equatoreal	2.35.27,3	2.33.54,41	16.12.28,72	B.
					U.	46-inch Dollond	2.31.19,4	2.33.0,81	16.11.35,27	M
Sept. 13	5	c^1 Capricorni	Disappearance	Dark	U.	Northumb. Equat.	19.59.10,0	20.1.10,07	8.30.2,41	C.
...	6	B.A.C. 7562	Disappearance	Dark	G.	5-feet Equatoreal	20.8.32,5	20.1.10,24	8.30.2,58	B.
14	7	κ Aquarii	Disappearance	Dark	U.	Northumb. Equat.	20.0.27,8	20.2.27,88	8.31.20,01	C.
					U.	Northumb. Equat.	19.8.43,2	19.10.51,27	7.35.55,94	C.
...	8	κ Aquarii	Reappearance	Bright	G.	5-feet Equatoreal	19.18.13,8	19.10.47,50	7.35.52,18	B.
15	9	λ Piscium	Disappearance	Bright	U.	Northumb. Equat.	19.42.57,0	19.45.0,50	8.9.59,58	C.
...	10	λ Piscium	Reappearance	Dark	G.	5-feet Equatoreal	19.52.45,9	19.45.57,78	8.10.56,70	B.
					U.	5-feet Equatoreal	0.58.23,7	0.57.30,15	13.17.42,13	B.
					U.	5-feet Equatoreal	2.7.14,3	2.6.20,71	14.26.21,42	M
Oct. 23	11	A ^a Cancrī	Disappearance	Bright	G.	5-feet Equatoreal	2.26.26,0	2.25.17,98	12.15.51,12	C.
...	12	A ^a Cancrī	Reappearance	Dark	G.	5-feet Equatoreal	3.21.52,8	3.20.44,10	13.11.8,16	C.
					U.	46-inch Dollond	3.20.59,9	3.20.52,45	13.11.16,49	B.
Dec. 6	13	λ Piscium	Disappearance	Dark	G.	5-feet Equatoreal	3.46.26,3	3.27.31,95	10.24.54,89	B.
					X.	Northumb. Equat.	3.27.48,3	3.27.32,08	10.24.55,02	C.
...	14	λ Piscium	Reappearance	Bright	U.	46-inch Dollond	3.27.33,6	3.27.34,08	10.24.57,01	M
					X.	Northumb. Equat.	4.16.7,3	4.15.51,00	11.13.6,02	C.
					U.	46-inch Dollond	4.16.52,0	4.16.52,50	11.14.7,35	M

N^o. 1. Very exact.

N^o. 2. Considered good.

N^o. 3. B's was judged to be a good observation: the counting in M's was found to be 1^s in defect, which has been allowed for.

N^o. 4. 'Good observation I think.' (B). M's observation was not to be depended upon on account of the awkwardness of position of the Telescope, which prevented keeping the eye steady.

N^o. 5. Both observations very exact.

N^o. 6. Very exact. The star is not in the Nautical Almanac: the place adopted in the subsequent calculations was taken from the British Association Catalogue, viz. mean R.A. Jan. 1, 1845, 21^h.36^m.39^s,18; mean N.P.D. Jan. 1, 1845, 99°.44'.50'',83.

N^o. 7. 'Very good. The star disappeared quite close to the rough edge.' (C). 'I think good: the star was very faint shortly before the disappearance.' (B).

N^o. 8. 'Doubtful to 1 or 2 seconds.' (C). B was not looking exactly at the right place: possibly a mistake of 1^m was committed in recording the observation.

N^o. 9. 'Pretty good: the star was excessively faint.' (B).

N^o. 10. 'Pretty exact: light clouds surrounding the Moon, and the star very faint.' (M). It seems from the calculation of this and the preceding observation, that the disappearance was noted too early, and the reappearance about as much too late.

N^o. 11. Uncertain, the Moon being low and the star faint.

N^o. 12. 'Very exact.' (C). 'I think good, as I was looking at the right place, but the star was very faint.' (B).

N^o. 13. No remark to B's observation. C's was somewhat doubtful: the counting was found 0,5 in advance, and the noted time has been corrected accordingly. M's remark was, 'seemed good.'

N^o. 14. 'Pretty good: perhaps a little late.' (C). 'The instrument was so unsteady that I could not be accurate.' (M). Evidently the noted time is 1^m in excess.

Disappearance of ω^2 Tauri, Feb. 14, $10^h.53^m.10^s.17 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$128^{\circ}.12'.4''95 + 15,0411 \times t$
Moon's Geocentric Right Ascension in arc	$62.20.46,95 + 0,5261 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$69.17.22,75 - 0,0483 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$54.15,77 \times [9,9990916] \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$14.47,15 \times (1 + 0,001 n)$
Star's Right Ascension in arc	$62.3.7,95 + e''$
Star's N.P.D.	$69.48.23,50 + f$
Geocentric Colatitude of the Observatory	$37.58.20,37 + v$
Moon's apparent Right Ascension in arc	$61^{\circ}.48'.8''63 + \delta R$
Moon's apparent N.P.D.	$69.52.49,30 + \delta \lambda$
Moon's apparent Semidiameter	$14.54,31 + \delta S$
Apparent Distance of Star from Moon's centre	$14.45,09 + \delta D$

$$\delta R = + 0,4657 t + 0,5281 \tau + 1,0042 x + 0,0036 y - 1,9665 m - 0,0122 v$$

$$\delta \lambda = - 0,0040 t - 0,0503 \tau - 0,0031 x + 1,0080 y + 2,1466 m - 0,0109 v$$

$$\delta S = - 0,0005 t + 0,8943 n$$

$$\delta D = - 0,8954 \delta R + 0,8954 e + 0,3010 \delta \lambda - 0,2996 f.$$

Final Equation :

$$+ 9'',22 = - 0,9001 x + 0,3002 y + 0,8954 e - 0,2996 f - 0,4177 t - 0,4880 \tau + 0,0077 v + 2,4070 m - 0,8943 n.$$

Reappearance of δ Piscium, Aug. 20, $9^h.23^m.2^s.20 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$289^{\circ}.55'.19''50 + 15,0411 \times t$
Moon's Geocentric Right Ascension in arc	$9.49.15,75 + 0,5378 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$82.22.38,15 - 0,1854 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$57.51,93 \times [9,9990916] \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$15.46,09 \times (1 + 0,001 n)$
Star's Right Ascension in arc	$10.10.37,95 + e''$
Star's N.P.D.	$83.15.9,70 + f$
Geocentric Colatitude of the Observatory	$37.58.20,37 + v$
Moon's apparent Right Ascension in arc	$10^{\circ}.24'.36''87 + \delta R$
Moon's apparent N.P.D.	$83.7.6,15 + \delta \lambda$
Moon's apparent Semidiameter	$15.49,33 + \delta S$
Apparent Distance of Star from Moon's centre	$16.3,17 + \delta D$

$$\delta R = + 0,5130 t + 0,5390 \tau + 1,0017 x - 0,0014 y + 2,1249 m + 0,0132 v$$

$$\delta \lambda = - 0,2038 t - 0,1854 \tau + 0,0012 x + 1,0034 y + 2,6784 m - 0,0106 v$$

$$\delta S = + 0,0007 t + 0,9493 n$$

$$\delta D = + 0,8587 \delta R - 0,8587 e - 0,5018 \delta \lambda + 0,5023 f.$$

Final Equation :

$$- 13'',84 = + 0,8596 x - 0,5047 y - 0,8587 e + 0,5023 f + 0,5421 t + 0,5559 \tau + 0,0166 v + 0,4806 m - 0,9493 n.$$

Reappearance of χ^4 Orionis, Aug. 26, $12^h.46^m.17^s.20 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$346.47.15.15 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc.....	$88.15.7.50 + 0.5249 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$69.41.3.76 + 0.0281 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$54.10.02 \times [9.9990916] \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter.....	$14.45.63 \times (1 + 0.001 n)$
Star's Right Ascension in arc	$88.34.56.55 + e''$
Star's N.P.D.	$70.18.44.60 + f$
Geocentric Colatitude of the Observatory	$37.58.20.37 + v$
Moon's apparent Right Ascension in arc.....	$88.49.48.48 + \delta R$
Moon's apparent N.P.D.	$70.23.28.53 + \delta \lambda$
Moon's apparent Semidiameter	$14.47.74 + \delta S$
Apparent Distance of Star from Moon's centre	$14.46.69 + \delta D$

$$\delta R = + 0.5559t + 0.5237\tau + 0.9979x - 0.0037y + 2.0766m + 0.0129v$$

$$\delta \lambda = - 0.0181t + 0.0298\tau + 0.0032x + 1.0023y + 2.5540m - 0.0083v$$

$$\delta S = + 0.0006t + 0.8877n$$

$$\delta D = + 0.8922\delta R - 0.8922e + 0.3209\delta \lambda - 0.3195f.$$

Final Equation :

$$+ 1''.05 = + 0.8913x + 0.3183y - 0.8922e - 0.3195f + 0.4896t + 0.4768\tau + 0.0089v + 2.6723m - 0.8877n.$$

Disappearance of E^1 Orionis, Aug. 26, $16^h.12^m.28^s.72 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$38.28.36.15 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc.....	$90.3.15.00 + 0.5239 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$69.47.23.88 + 0.0334 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$54.8.93 \times [9.9990916] \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter.....	$14.45.34 \times (1 + 0.001 n)$
Star's Right Ascension in arc	$90.43.9.15 + e''$
Star's N.P.D.	$70.10.50.90 + f$
Geocentric Colatitude of the Observatory	$37.58.20.37 + v$
Moon's apparent Right Ascension in arc.....	$90.31.11.01 + \delta R$
Moon's apparent N.P.D.	$70.20.35.82 + \delta \lambda$
Moon's apparent Semidiameter.....	$14.54.14 + \delta S$
Apparent Distance of Star from Moon's centre.	$14.53.89 + \delta D$

$$\delta R = + 0.4309t + 0.5272\tau + 1.0064x - 0.0030y + 1.6868m + 0.0105v$$

$$\delta \lambda = - 0.0039t + 0.0351\tau + 0.0026x + 1.0099y + 2.0139m - 0.0118v$$

$$\delta S = + 0.0005t + 0.8941n$$

$$\delta D = - 0.7118\delta R + 0.7118e + 0.6548\delta \lambda - 0.6539f.$$

Final Equation :

$$+ 0''.25 = - 0.7146x + 0.6634y + 0.7118e - 0.6539f - 0.3097t - 0.3522\tau - 0.0152v + 0.1181m - 0.8941n.$$

Disappearance of c^1 Capricorni, Sept. 13, $8^h.30^m.2^s.49 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$300^\circ.17'.32''.25 + 15''.0411 \times t$
Moon's Geocentric Right Ascension in arc	$323.43.7.05 + 0,5810 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$99.3.21.21 - 0,1905 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$59.42,58 \times [9,9990916] \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$16.16,22 \times (1 + 0,001 n)$
Star's Right Ascension in arc	$324.11.54,45 + e''$
Star's N.P.D.	$99.46.54,90 + f$
Geocentric Colatitude of the Observatory.....	$37.58.20,37 + v$

Moon's apparent Right Ascension in arc	$323.58.1''.43 + \delta R$
Moon's apparent N.P.D.	$99.55.24,79 + \delta \lambda$
Moon's apparent Semidiameter	$16.23,49 + \delta S$
Apparent Distance of Star from Moon's centre .	$16.6,22 + \delta D$

$$\delta R = +0,4363t + 0,5867\tau + 1,0100x + 0,0007y + 0,9033m + 0,0056v$$

$$\delta \lambda = -0,1812t - 0,1923\tau - 0,0007x + 1,0073y + 3,1463m - 0,0084v$$

$$\delta S = +0,0003t + 0,9835n$$

$$\delta D = -0,8369\delta R + 0,8369e + 0,5274\delta \lambda - 0,5280f.$$

Final Equation:

$$+ 17''.27 = -0,8457x + 0,5307y + 0,8369e - 0,5280f - 0,4610t - 0,5924\tau - 0,0091v + 0,9035m - 0,9835n.$$

Disappearance of B.A.C. 7562, Sept. 13, $8^h.31^m.20^s.01 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$300^\circ.36'.58''.20 + 15''.0411 \times t$
Moon's Geocentric Right Ascension in arc	$323.43.52,05 + 0,5810 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$99.3.6,43 - 0,1905 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$59.42,83 \times [9,9990916] \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$16.16,22 \times (1 + 0,001 n)$
Star's Right Ascension in arc	$324.10.50,70 + e''$
Star's N.P.D.	$99.44.25,30 + f$
Geocentric Colatitude of the Observatory.....	$37.58.20,37 + v$

Moon's apparent Right Ascension in arc	$323.58.35''.27 + \delta R$
Moon's apparent N.P.D.	$99.55.10,95 + \delta \lambda$
Moon's apparent Semidiameter	$16.23,51 + \delta S$
Apparent Distance of Star from Moon's centre .	$16.10,54 + \delta D$

$$\delta R = +0,4360t + 0,5867\tau + 1,0100x + 0,0007y + 0,8921m + 0,0055v$$

$$\delta \lambda = -0,1813t - 0,1924\tau - 0,0007x + 1,0074y + 3,1474m - 0,0084v$$

$$\delta S = +0,0003t + 0,9835n$$

$$\delta D = -0,7357\delta R + 0,7357e + 0,6650\delta \lambda - 0,6655f.$$

Final Equation:

$$+ 12,97 = -0,7435x + 0,6694y + 0,7357e - 0,6655f - 0,4416t - 0,5595\tau - 0,0097v + 1,4368m - 0,9835n.$$

Disappearance of κ Aquarii, Sept. 14, $7^h.35^m.55^s.94 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$287.42.49,05 + 15,0411 \times t$
Moon's Geocentric Right Ascension in arc.....	$336.57.3,45 + 0,5653 \times (t + \tau) + x$
Moon's Geocentric N.P.D.	$94.28.21,86 - 0,2043 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$59.25,56 \times [9,9990916] \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$16.11,58 \times (1 + 0,001 n)$
Star's Right Ascension in arc.....	$337.26.59,55 + e$
Star's N.P.D.	$95.1.2,30 + f$
Geocentric Colatitude of the Observatory	$37.58.20,37 + v$

Moon's apparent Right Ascension in arc.....	$337.24.58,21 + \delta R$
Moon's apparent N.P.D.....	$95.17.5,82 + \delta \lambda$
Moon's apparent Semidiameter.....	$16.17,17 + \delta S$
Apparent Distance of Star from Moon's centre	$16.11,07 + \delta D$

$$\delta R = + 0,4644t + 0,5691\tau + 1,0070x + 0,0006y + 1,6865m + 0,0105v$$

$$\delta \lambda = - 0,1946t - 0,2058\tau - 0,0008x + 1,0057y + 2,9400m - 0,0098v$$

$$\delta S = + 0,0006t + 0,9772n$$

$$\delta D = - 0,1240\delta R + 0,1240e + 0,9922\delta \lambda - 0,9922f.$$

Final Equation :

$$+ 6'',10 = - 0,1256x + 0,9978y + 0,1240e - 0,9922f - 0,2512t - 0,2748\tau - 0,0110v + 2,7081m - 0,9772n.$$

Reappearance of κ Aquarii, Sept. 14, $8^h.9^m.59^s.58 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$296.15.7,50 + 15,0411 \times t$
Moon's Geocentric Right Ascension in arc.....	$337.16.18,45 + 0,5650 \times (t + \tau) + x$
Moon's Geocentric N.P.D.	$94.21.24,23 - 0,2045 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$59.25,02 \times [9,9990916] \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	$16.11,43 \times (1 + 0,001 n)$
Star's Right Ascension in arc.....	$337.26.59,55 + e$
Star's N.P.D.....	$95.1.2,30 + f$
Geocentric Colatitude of the Observatory	$37.58.20,37 + v$

Moon's apparent Right Ascension in arc.....	$337.40.30,80 + \delta R$
Moon's apparent N.P.D.	$95.10.25,69 + \delta \lambda$
Moon's apparent Semidiameter.....	$16.18,11 + \delta S$
Apparent Distance of Star from Moon's centre	$16.25,06 + \delta D$

$$\delta R = + 0,4485t + 0,5694\tau + 1,0080x + 0,0005y + 1,4641m + 0,0091v$$

$$\delta \lambda = - 0,1966t - 2,2062\tau - 0,0006x + 1,0068y + 2,9611m - 0,0097v$$

$$\delta S = + 0,0005t + 0,9781n$$

$$\delta D = + 0,8171\delta R - 0,8171e + 0,5718\delta \lambda - 0,5721f.$$

Final Equation :

$$- 6'',95 = + 0,8233x + 0,5761y - 0,8171e - 0,5721f + 0,2535t + 0,3473\tau + 0,0019v + 2,8894m - 0,9781n.$$

Disappearance of λ Piscium, Sept. 15, $13^h.17^m.42^s.13 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$14.22.32.25 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc	$353.30.33.60 + 0.5511 \times (t + \tau) + x$
Moon's Geocentric N.P.D.	$88.21.47.93 - 0.2040 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$58.49.63 \times [9.9990916] \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter	$16.1.79 \times (1 + 0.001 n)$
Star's Right Ascension in arc	$353.33.12.75 + e$
Star's N.P.D.	$89.3.49.10 + f$
Geocentric Colatitude of the Observatory	$37.58.20.37 + v$
Moon's apparent Right Ascension in arc	$353.17.33.75 + \delta R$
Moon's apparent N.P.D.	$89.7.33.30 + \delta \lambda$
Moon's apparent Semidiameter	$16.11.61 + \delta S$
Apparent Distance of Star from Moon's centre	$16.5.28 + \delta D$

$$\delta R = + 0.4076t + 0.5565\tau + 1.0099x + 0.0001y - 0.7876m - 0.0049v$$

$$\delta \lambda = - 0.2052t - 0.2060\tau - 0.0001x + 1.0101y + 2.7733m - 0.0108v$$

$$\delta S = - 0.0003t + 0.9716n$$

$$\delta D = - 0.9726\delta R + 0.9726e + 0.2323\delta \lambda - 0.2322f.$$

Final Equation:

$$+ 6''.33 = - 0.9822x + 0.2345y + 0.9726e - 0.2322f - 0.4438t - 0.5891\tau + 0.0023v + 1.4102m - 0.9716n.$$

Reappearance of λ Piscium, Sept. 15, $14^h.26^m.21^s.42 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$31.35.10.65 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc	$354.8.21.90 + 0.5494 \times (t + \tau) + x$
Moon's Geocentric N.P.D.	$88.7.48.58 - 0.2036 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$58.47.96 \times [9.9990916] \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter	$16.1.33 \times (1 + 0.001 n)$
Star's Right Ascension in arc	$353.33.12.75 + e$
Star's N.P.D.	$89.3.49.10 + f$
Geocentric Colatitude of the Observatory	$37.58.20.37 + v$
Moon's apparent Right Ascension in arc	$353.46.13.12 + \delta R$
Moon's apparent N.P.D.	$88.53.30.13 + \delta \lambda$
Moon's apparent Semidiameter	$16.9.73 + \delta S$
Apparent Distance of Star from Moon's centre	$16.35.94 + \delta D$

$$\delta R = + 0.4280t + 0.5539\tau + 1.0084x + 0.0002y - 1.3399m - 0.0083v$$

$$\delta \lambda = - 0.2035t - 0.2054\tau - 0.0001x + 1.0087y + 2.7655m - 0.0108v$$

$$\delta S = - 0.0005t + 0.9697n$$

$$\delta D = + 0.7833\delta R - 0.7833e - 0.6215\delta \lambda + 0.6215f.$$

Final Equation:

$$- 26''.21 = + 0.7899x - 0.6267y - 0.7833e + 0.6215f + 0.4622t + 0.5615\tau + 0.0002v - 2.7682m - 0.9697n.$$

Disappearance of A² Cancri, Oct. 23, 12^h.15^m.51^s.12 + $t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	36.19.29,70 + 15,0411 $\times t$
Moon's Geocentric Right Ascension in arc	128.48.9,00 + 0,4918 $\times (t + \tau) + x$
Moon's Geocentric N.P.D.	76.41.26,99 + 0,1311 $\times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	54.23,67 $\times [9,9990916] \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	14.49,35 $\times (1 + 0,001 n)$
Star's Right Ascension in arc	129.37.9,90 + θ
Star's N.P.D.	77.19.39,30 + f
Geocentric Colatitude of the Observatory	37.58.20,37 + ν
Moon's apparent Right Ascension in arc.....	129.22.25,22 + δR
Moon's apparent N.P.D.....	77.23.33,53 + $\delta \lambda$
Moon's apparent Semidiameter	14.51,43 + δS
Apparent Distance of Star from Moon's centre	14.54,45 + δD

$$\delta R = +0,4992t + 0,4912\tau + 0,9995x - 0,0024y + 2,0552m + 0,0128\nu$$

$$\delta \lambda = +0,1005t + 0,1325\tau + 0,0021x + 1,0023y + 2,5346m - 0,0094\nu$$

$$\delta S = +0,0006t + 0,8914n$$

$$\delta D = -0,9417\delta R + 0,9417e + 0,2623\delta \lambda - 0,2614f.$$

Final Equation:

$$-3'',02 = -0,9407x + 0,2651y + 0,9417e - 0,2614f - 0,4443t - 0,4278\tau - 0,0145\nu - 1,2706m - 0,8914n.$$

Reappearance of A² Cancri, Oct. 23, 13^h.11^m.8^s.16 + $t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	50.11.1,50 + 15,0411 $\times t$
Moon's Geocentric Right Ascension in arc	129.15.19,65 + 0,4915 $\times (t + \tau) + x$
Moon's Geocentric N.P.D.	76.48.43,47 + 0,1321 $\times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	54.24,27 $\times [9,9990916] \times (1 + 0,001 m)$
Moon's Geocentric Semidiameter	14.49,51 $\times (1 + 0,001 n)$
Star's Right Ascension in arc.....	129.37.9,90 + θ
Star's N.P.D.	77.19.39,30 + f
Geocentric Colatitude of the Observatory	37.58.20,37 + ν
Moon's apparent Right Ascension in arc.....	129.49.4,54 + δR
Moon's apparent N.P.D.....	77.29.10,06 + $\delta \lambda$
Moon's apparent Semidiameter	14.53,55 + δS
Apparent Distance of Star from Moon's centre.	15.1,22 + δD

$$\delta R = +0,4650t + 0,4921\tau + 1,0018x - 0,0023y + 2,0286m + 0,0126\nu$$

$$\delta \lambda = +0,1024t + 0,1337\tau + 0,0021x + 1,0045y + 2,4397m - 0,0100\nu$$

$$\delta S = +0,0006t + 0,8936n$$

$$\delta D = +0,7553\delta R - 0,7553e + 0,6336\delta \lambda - 0,6330f.$$

Final Equation:

$$-7'',67 = +0,7580x + 0,6347y - 0,7553e - 0,6330f + 0,4155t + 0,4564\tau + 0,0032\nu + 3,0780m - 0,8936n.$$

Disappearance of λ Piscium, Dec. 6, $10^h.24^m.54^s.96 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$51.53.0.30 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc	$353.48.23.85 + 0.5282 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$88.13.48.13 - 0.1932 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$57.49.94 \times [9.9990916] \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter	$15.45.52 \times (1 + 0.001 n)$
Star's Right Ascension in arc	$353.33.5.40 + e''$
Star's N.P.D.	$89.3.50.80 + f''$
Geocentric Colatitude of the Observatory	$37.58.20.37 + v$

Moon's apparent Right Ascension in arc.....	$353.18.4.88 + \delta R$
Moon's apparent N.P.D.	$88.58.57.45 + \delta \lambda$
Moon's apparent Semidiameter.....	$15.50.98 + \delta S$
Apparent Distance of Star from Moon's centre .	$15.46.97 + \delta D$

$$\delta R = + 0.4498 t + 0.5310 \tau + 1.0054 x + 0.0003 y - 1.8289 m - 0.0114 v$$

$$\delta \lambda = - 0.1920 t - 0.1944 \tau - 0.0002 x + 1.0057 y + 2.7250 m - 0.0105 v$$

$$\delta S = - 0.0006 t + 0.9510 n$$

$$\delta D = - 0.9507 \delta R + 0.9507 e - 0.3097 \delta \lambda + 0.3098 f.$$

Final Equation :

$$+ 4''.01 = - 0.9557 x - 0.3118 y + 0.9507 e + 0.3098 f - 0.3675 t - 0.4446 \tau + 0.0141 v + 0.8946 m - 0.9510 n.$$

Reappearance of λ Piscium, Dec. 6, $11^h.13^m.6^s.02 + t^s + \tau^s$ Greenwich Mean Solar Time.

Right Ascension of Zenith in arc	$63.57.45.00 + 15.0411 \times t$
Moon's Geocentric Right Ascension in arc.....	$354.13.50.70 + 0.5279 \times (t + \tau) + x''$
Moon's Geocentric N.P.D.	$88.4.29.91 - 0.1930 \times (t + \tau) + y$
Moon's Horizontal Parallax at the Observatory	$57.48.60 \times [9.9990916] \times (1 + 0.001 m)$
Moon's Geocentric Semidiameter	$15.45.16 \times (1 + 0.001 n)$
Star's Right Ascension in arc.....	$353.33.5.40 + e''$
Star's N.P.D.	$89.3.50.80 + f''$
Geocentric Colatitude of the Observatory	$37.58.20.37 + v$

Moon's apparent Right Ascension in arc.....	$353.40.24.72 + \delta R$
Moon's apparent N.P.D.	$88.49.43.02 + \delta \lambda$
Moon's apparent Semidiameter.....	$15.48.85 + \delta S$
Apparent Distance of Star from Moon's centre .	$15.54.81 + \delta D$

$$\delta R = + 0.4770 t + 0.5297 \tau + 1.0035 x + 0.0003 y - 2.0131 m - 0.0125 v$$

$$\delta \lambda = - 0.1908 t - 0.1938 \tau - 0.0002 x + 1.0038 y + 2.7238 m - 0.0105 v$$

$$\delta S = - 0.0007 t + 0.9489 n$$

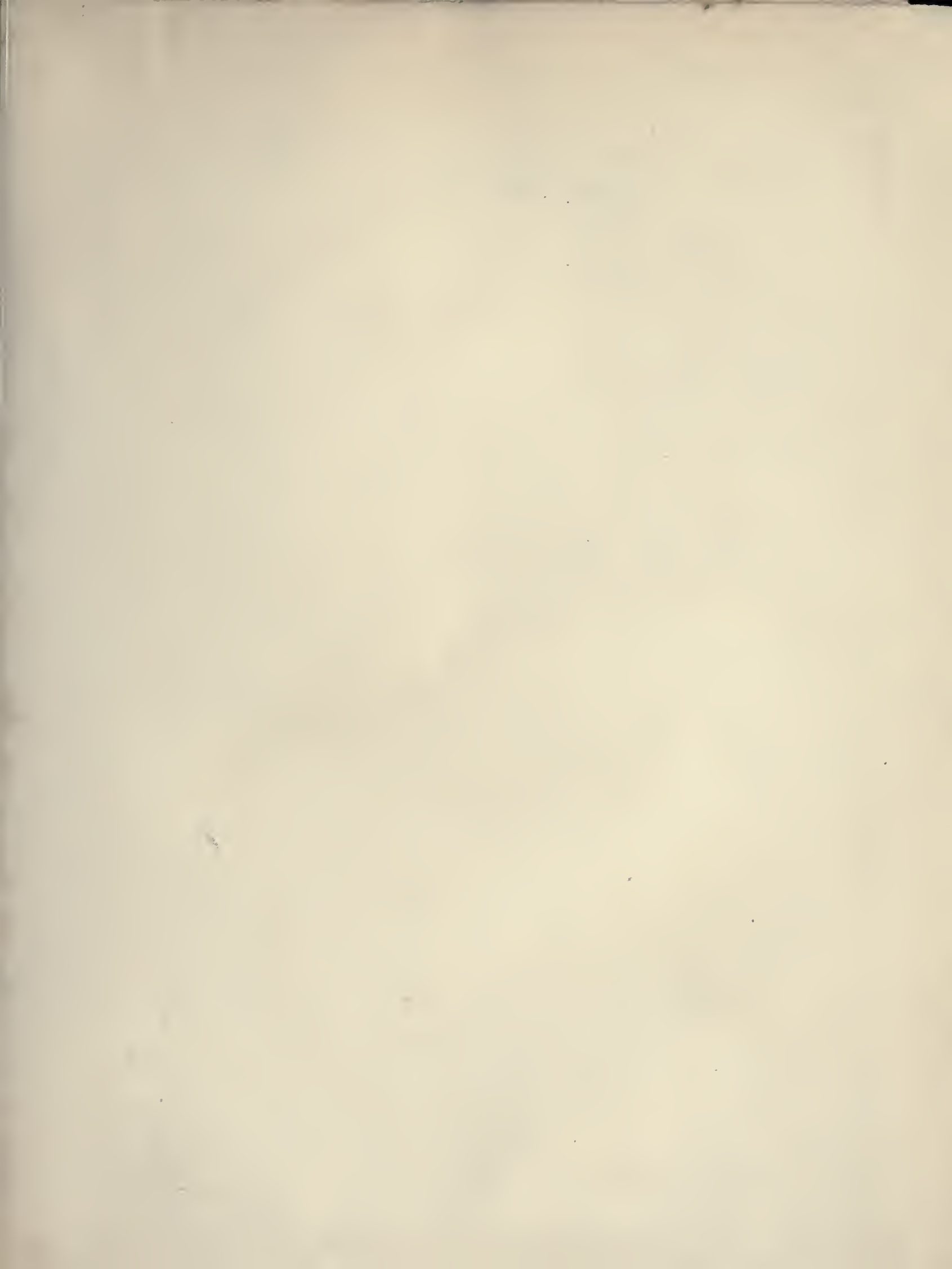
$$\delta D = + 0.4600 \delta R - 0.4600 e - 0.8879 \delta \lambda + 0.8879 f.$$

Final Equation :

$$- 5''.96 = + 0.4617 x - 0.8911 y - 0.4600 e + 0.8879 f + 0.3895 t + 0.4157 \tau + 0.0035 v - 3.3443 m - 0.9489 n.$$

HOURLY METEOROLOGICAL OBSERVATIONS MADE AT THE CAMBRIDGE OBSERVATORY
NEAR THE TIME OF THE VERNAL EQUINOX, 1845.

Day and Hour.	Barom.	Att. Ther.	Exter. Ther.	Clouds 0-10.	Class of Clouds.	Direction of Wind.	Strength of Wind 0-6.	Remarks.
<i>h.</i>	Inches.	o	o					
Mar. 21. 6	30,500	35,5	38,5	10	Stratus and Cirri	S.W.	1,0	Cirrus in the zenith.
7	,521	36,5	37,0	10	Cirri	S.S.W.	1,0	Moon's place barely discernible.
8	,518	36,9	36,9	10	Nimbi	S.W.	1,5	Moon visible.
9	,516	36,8	36,6	10	.....	S.W.	1,7	...
10	,495	36,5	36,1	10	.....	S.	2	Not a break to be seen.
11	,506	35,9	35,6	10	.....	S.	2	Clouds passing the Moon rapidly: rather lighter to S.S.E.
12	,456	35,9	35,0	10	Cirro- stratus	S.S.E.	3	Quite cloudy, snow and sleet falling, wind gusty. Before this observation the shutters of Circle Room were closed.
13	,468	35,8	34,9	10	Nimbi	S.S.E.	2,7	Rain falling. Change from snow to rain about 12 ^h .30 ^m .
14	,451	35,7	35,4	10	.....	S.S.E.	3	Rain falling very fast. Wind blowing in strong gusts.
15	,430	35,7	36,3	10	.....	S.S.E.	3	Heavy rain still falling.
16	,401	36,0	37,5	10	.....	S.W.	4	Wind high and steady. A few drops of rain falling.
17	,392	36,0	38,4	10	.....	S.W.	3,6	Not a break visible: no rain.
19	,364	36,1	39,8	10	.....	S.W.	3,7	Some rain has recently fallen.
20	,360	36,4	42,4	10	.....	S.W.	3	Raining fast.
21	,362	36,9	43,0	10	.....	S.W.	3	...
22	,360	37,1	44,0	10	.....	S.W.	2,3	...
23	,340	37,4	46,2	9	Cirro-stratus and Scud	S.W.	2,5	A few stratus in the North horizon. No rain.
Mar. 22. 0	,328	38,2	49,8	9	.....	S.W.	3	A few drops of rain. Clouds moving rapidly.
1	,328	39,3	51,3	9	.....	S.W.	2,5	... .. Cumuli towards the North.
2	,314	39,9	52,9	10	.....	S.W.	2,5	Air remarkably mild and soft.
3	,310	40,0	53,4	10	Nimbi	S.W.	2,5	... .. Wind shifting about.
4	,322	40,0	51,4	10	.....	S.W.	2,3	A little rain falling. Stratus generally in the horizon.
5	,316	40,4	49,6	10	.....	S.W.	2	Rain. Clouds seem to be coming more from W.S.W.
6	,308	40,3	48,5	10	.....	S.W.	2	Raining fast.



**University of Cambridge.
Observatory.
Astronomical observations.**

